# APPENDIX A

MARKET SURVEYS

**Department of Veterans Affairs**

# Memorandum

Date: NOV 21 2012

From: Acting Director, Real Property Service (003C1E)

Subj: Market Survey Results – VA Outpatient Clinic, San Jose, CA

To: Director, VA Palo Alto Health Care System, Palo Alto, CA (10N21/650)

1. Attached is the market survey report for the above-mentioned project prepared after the market survey conducted with your staff on September 28, 2012.

2. Included in the report is a listing of all the sites offered and surveyed with the team's determination for qualifying or disqualifying each site.

3. We request the ability to conduct a two-phased due diligence process as described in this report to ensure the acquisition of a clean and buildable site in the least amount of time. Your approval of the market survey report serves as your approval for us to contract with our real estate broker, Public Properties, LLC, for the completion of the due diligence tasks and move forward toward reaching an assignable option to purchase with the top-ranked site that satisfies VA's requirements and needs.

4. Please provide this office with your approval of the findings on the attached document by November 2, 2012, or sooner. If you have any questions regarding this matter, please contact Project Manager Sam Perminter at 202-632-5440 or via email at Samuel.Perminter@VA.gov.

Jessica L. Kaplan

Attachments

Concurrence _____ VAMC Director 11/28/12 Date

VA FORM MAR 1989 2105

**MARKET SURVEY AND SITE EVALUATION REPORT**
**San Jose, CA**
**November 13, 2012**

**PURPOSE:** Conduct a market survey and evaluation of properties offered in response to an advertisement that was posted on FedBizOpps on September 7 through September 24, 2012. The ad detailed VA's desire to lease between 60,000 and 72,000 net usable square feet (NUSF) of space, or acquire a piece of land suitable for new construction. The delineated area, as outlined in the ad, encompassed a large portion of the South Bay/San Jose area. To be considered, land sites were required to be capable of accommodating a three story structure, 72,000 net square feet in size with on-site parking for approximately 520 vehicles. Sites were also required to meet the current security setbacks. Existing buildings that met the requirement were included in the considerations. A copy of the advertisement and delineated area map are included as Attachment No. 1.

**MARKET SURVEY PARTICIPANTS:**

| | |
|---|---|
| *Mr. Sam Perminter, | Project Manager, VACO |
| *Mr. Jason Nietupski, | Palo Alto, CA VAMC |
| *Mr. Max Evans, | Palo Alto, CA VAMC |
| *Dr. John Chardos, | Palo Alto, CA VAMC |
| *Mr. Clayton Bayne, | Palo Alto, CA VAMC |
| Mr. Brad Seifert, | Public Properties |
| Mr. James Kennedy, | Public Properties |

* *Denotes Site Evaluation Team Members*

**DISCUSSION:** Responses were received from six (6) potential offerors to survey a total of eleven (11) different sites. Of the six offerors, four (4) were private developers and two (2) were local municipal agencies. All but one of the sites were considered as land/new construction scenarios. A map identifying the location of each site is attached as Attachment No. 2.

The following is a list of all the submitted sites:

| | |
|---|---|
| Site 1 | 1290 Parkmoor Ave |
| Site 2 | Taylor and 87 |
| Site 3 | Taylor Street |
| Site 4 | East Santa Clara |
| Site 5 | Fairground Parking |
| Site 6 | Fairground |
| Site 7 | Arcadia |
| Site 8 | Singleton – Landfill |
| Site 9 | 705 Creekside Way |
| Site 10 | City Hall |
| Site 11 | Highway 87 Substation |

Each of the eleven (11) sites were evaluated and rated based on a number of evaluation factors which were identified and weighted in descending order of importance. These evaluation factors are listed in the attached document – Market Survey Site Criteria (Attachment No. 3).

The purpose of the evaluation was to identify the best qualified site for the location of the proposed San Jose, CA, Outpatient Clinic.

## SCORES

The following is a summary of the scores for the evaluated sites:

| | | |
|---|---|---|
| Site 1 | 1290 Parkmoor Ave | **75.00** |
| Site 2 | Taylor and 87 | **75.80** |
| Site 3 | Taylor Street | **75.70** |
| Site 4 | East Santa Clara | **86.20** |
| Site 5 | Fairground Parking | **54.60** |
| Site 6 | Fairground | **53.40** |
| Site 7 | Arcadia | **64.90** |
| Site 8 | Singleton - Landfill | **38.90** |
| Site 9 | 705 Creekside Way | **48.80** |
| Site 10 | City Hall | **80.20** |
| Site 11 | Highway 87 Substation | **37.40** |

## SITE OVERVIEWS

| | |
|---|---|
| Site 1 | 1290 Parkmoor Ave |

1290 Parkmoor is an existing 68,000 SF 3-story office building. The property is currently vacant and formerly housed various county offices. Highway, mass transit, and amenity access is all excellent. Surrounding uses are office and residential; clinic would mix nicely. The building only has one elevator, and the shell would require extensive renovation and expansion to fit the clinic layout. The property, as currently laid out, would be too small to add the needed parking and renovate the building to fit VA's space needs.

| Site 2 | Taylor and 87 |
|---|---|

Taylor and 87 is a vacant parking lot site that is currently controlled by the City of San Jose. The site is located immediately off of Highway 87 and offers excellent access to downtown San Jose, public transportation and amenities. Surrounding uses are county office buildings, including the courthouse and jail, as well as other two to four story office buildings. Site is only five acres; VA would likely have to construct a parking garage in order to facilitate the required parking.

| Site 3 | Taylor Street |
|---|---|

Site 3 is located several blocks east of the Taylor and 87 site; access from the Highway is direct but requires a 8 block drive through a commercial/residential area. The site is located in close proximity to bus stops, but does not have direct access to rail. Area surrounding the site is undergoing a redevelopment; as such some amenities are within walking distance and others will likely be available by the time VA opens the facility. Surrounding area is a mix of commercial and residential; most of the residential is newly constructed multifamily housing. The sites size would allow for construction of the facility and all parking on-grade.

| Site 4 | East Santa Clara |
|---|---|

The East Santa Clara property is a cleared parcel of land that was the former location of the San Jose Medical Center. The site is centrally located along the major east-west axis through downtown San Jose. As such the site is easily accessible by bus. Additionally, the site would benefit from the planned expansion of the BART subway which would stop nearby. Adjacent uses include medical office space, retail, and traditional office space. The site is in close proximity to many amenities. The site can accommodate VA's need with or without structured parking.

| Site 5 | Fairground Parking |
|---|---|

Site 5 is located in southern San Jose and is currently in use as a parking lot by the County. The site is not far from the highway and accessible by bus; rail does not stop near the site. The site has virtually no access to amenities. The surrounding area is very industrial; with the exception of a county medical building that is two blocks southeast, heavy industrial and warehouse space border the site in each direction. The site can accommodate VA's use with on-grade parking but VA may have to find a parking area for city vehicles that are currently stored on the site.

| Site 6 | Fairground |
|---|---|

Site 6 is located immediately south of the Fairground Parking Site; Site 6 is currently a portion of the Fairground. The site is not far from the highway and accessible by bus; rail does not stop near the site. The site has virtually no access to amenities. The surrounding area is very industrial; with the exception of a county medical building that is one block east, heavy industrial space and the Fairground border the site in each direction. The site is large and can be subdivided to accommodate VA's use with on-grade parking.

| Site 7 | Arcadia |
|---|---|

The Arcadia Site is located in the eastern portion of the delineated area. The bus stops directly across the street but the line is limited and would require patients coming from downtown to change busses multiple times. The site has access to Highway 101 which is one mile west; site has no access to rail. A large sampling of amenities are located northwest of the site; though the amenities are less than one-half mile from site, they would not be easily accessed by foot. The site is currently cleared farm land. Surrounding uses include single family residential, a retail mall, and strip retail. Site could easily accommodate VA's size requirements.

| Site 8 | Singleton – Landfill |
|---|---|

The Singleton property was formerly used as a landfill and would require significant remediation prior to development. The site is located in the southern portion of the delineated area and is accessible from Highway 101. The bus currently stops several blocks from the site; there is no rail access. The site is not in close proximity to any amenities. Surrounding uses include a high school, single family residential, and parkland that at one point was a landfill.

| Site 9 | 705 Creekside Way |
|---|---|

705 Creekside is located immediately off Highway 17 but access requires traversing through a portion of the Courtyard Hotel parking lot. The site is within walking distance of both bus and rail. Amenities are located three to four blocks from the site. Surrounding areas include hotel, office, and retail space; area is very developed. The site is very small and likely would not be able to accommodate VA's needs without the use of a shared parking facility.

| Site 10 | City Hall |
|---|---|

The City Hall site consists of a portion of the parcel that San Jose's vacant City Hall building sits on. The area is easily accessible from Interstate 87; rail and bus stop directly at the site. There are plentiful amenities within walking distance of the site. Surrounding area consist of county office buildings, office with street level retail, and multifamily residential. The site may require structured parking.

| Site 11 | Highway 87 Substation |
|---|---|

Site 11 is a cleared parcel that is located adjacent to the Highway 87 overpass. The site has access to the bus line and rail is less than one-half mile from the site. Amenities are located to the west of the site; to be easily accessed a small bridge would be required. The site is surrounded by the highway, train tracks, a power substation, and a creek that is bordered by amenities. The site could accommodate VA's design with on-grade parking.

**PREFERRED SITES:**
Following the market tour Public Properties compiled all site scores provided by the market survey team; additionally all notes were transcribed. The following is a summary of strengths and weaknesses for the three highest scoring sites:

**STRENGHTS AND WEAKNESSES OF PREFERRED SITES:**

**East Santa Clara**
**Owner: County of Santa Clara**

Surrounding Area
- The site is bordered by private and county medical offices to the south, east, and west
- The northern edge is predominantly residential
- East Santa Clara Street is a major commercial thoroughfare, numerous commercial properties dot the street for several miles in either direction

Accessibility
- The site is located within walking distance of the downtown San Jose area
- East Santa Clara is one of the main roads through downtown and intercepts both Highway 87 and Highway 101
- Multiple bus lines drop off and transfer in the immediate vicinity of the site
- A current proposal to extend BART subway service to San Jose is slated to feature a stop within a few blocks of the site
- Current roads are more than capable of supporting the excess traffic the proposed clinic would create

Man Made Conditions
- The site is a ten acre square (approximately), with 150 yards of frontage on East Santa Clara
- Currently in a raw state, the land was formerly the site of a small hospital that was closed in December 2004 and demolished in the Fall of 2010
- All utilities, including electric, gas, water, sewer, telephone, and fiber, are available to the site

Natural Conditions
- The site has no known natural environmental issues at this time
- It is located outside of the 100 year flood plain

**City Hall Site**
**Owner: County of Santa Clara**

Surrounding Area
- The site is located in an area populated by municipal structures, it was formerly the San Jose city hall
- County Jail, Courts, Assessor, and Clerk offices are all adjacent

- San Jose City Police headquarters is also next door

Accessibility
- Multiple transit options are available at the site, including light rail and several bus lines
- The San Jose Light rail currently stops on the street in front of the site
- The site is located two blocks off of Highway 87, between West Hedding Street and West Taylor Street, both major thoroughfares

Man Made Conditions
- The vacant city hall structure currently occupies the site and will need to be demolished prior to any redevelopment
- The structure dates to the 1960s and has not been in use for several years, demolition may raise additional issues
- All utilities, including electric, gas, water, sewer, telephone, and fiber, are available to the site

Natural Conditions
- The site has no known natural environmental issues at this time
- It is located outside of the 100 year flood plain

**Taylor Street and 87**
**Owner: City of San Jose**

Surrounding Area
- Located a block from the City Hall Site, the comments are largely identical
- Property faces Highway 87 to the west, Taylor St to the south, a residential area across the street to the east, and the Santa Clara municipal buildings to the north

Accessibility
- The site has similar characteristics to the City Hall Site, however as it is a block south and west, it fronts immediately on highway 87
- Site is 2 blocks from the light rail station and multiple bus lines (both on N 1st St)

Man Made Conditions
- Site is currently utilized as a satellite parking lot several acres in size, no improvements otherwise
- All utilities, including electric, gas, water, sewer, telephone, and fiber, are available to the site

Natural Conditions
- The site has no known natural environmental issues at this time
- It is located outside of the 100 year flood plain

**CHALLENGES:**
Each of these three sites have unique factors that will add some complication to the negotiation and acquisition phase. The East Santa Clara and City Hall sites are both controlled by the County of Santa Clara. Though the properties are

available for purchase or ground lease the County has rules and regulations that they must follow when disposing of property; this will make transactions between VA and the County more complicated.

In addition, the City Hall site is currently occupied by the vacant structure of the old city hall, which will need to be torn down and remediated before the VA can proceed. As the structure must be removed prior to VA's completion of due diligence, there is a potential for delays. Furthermore the cost of demolishing the building could be prohibitive.

In preliminary discussions with County officials over an acquisition of the East Santa Clara site they have indicated that the County would need to receive the full value for which it paid. This is an issue for two reasons; the VA cannot pay more than the appraised value (property values in San Jose have fluctuated in the past few years, the County may be below-water), and the appraised value may exceed the budgetary capacity for the project. Given its central location and rare acreage there is a feasible chance that the per-acre cost could be too high for VA. The property is also zoned for a seven-story building, further increasing its value.

Taylor Street and 87 brings with it a similar set of issues. The property is controlled by the City of San Jose, which has been amenable to repurposing land for VA. Similar to the County, the City must follow regulations when disposing of property; this may make the process of agreeing to terms on an option-to-purchase contract more complicated.

**RECOMMENDATIONS:**

It is the recommendation of the Market Survey Team that information gathering and clarification of potential deal terms take place for each of the aforementioned sites. Given the challenges unique to each, there are several internal and external steps that will need to be undertaken before due diligence can begin.

Public Properties has been tasked by the Team to identify the most accurate costs for a structured parking scenario. This is being done for two reasons: one, the Taylor and 87 parcel size is on the lower end of suitable and may require structured parking to meet the 520 stall requirement. Two, the per-acre cost on all of these sites may be high enough that the use of a parking garage in place of land could actually be a net-benefit.

Following the parking analysis and information gathering, VA and Public Properties will be able to approach the landowners with a clear understanding of how much land is truly needed. The City and County should then be able to provide the VA with accurate pricing for each site. Should the asking price be within the project's budget, it is the recommendation of the Team that due

diligence and option negotiations proceed for the East Santa Clara and City Hall sites.

**CONCLUSION:**
It is the determination of the Contracting Officer to accept the recommendation of the Site Evaluation Team, and proceed with the preliminary negotiations and internal study of parking scenarios. Once completed, this office can proceed to acquiring the requisite due diligence and negotiate an option to purchase agreement with the preferred site.

Attachments

Prepared by: Public Properties for Department of Veterans Affairs, Real Property Service

Concurrence: _____ Date: NOV 21 2012
Sam Perminter, Realty Specialist (003C1E)

Concurrence: _____ Date: NOV 21 2012
Hong Hitchings, Contracting Officer (003C1E)

Concurrence: _____ Date: NOV 21 2012
Jessica Kaplan, Acting Director (003C1E)

Concurrence: _____ Date: 11/27/12
Director, VAMC Palo Alto

ATTACMENT 1

# N--The Department of Veterans Affairs Seeks Expressions of Interest for 60,000 to 72,000 Net Usable Square Feet of Clinic Space in San Jose, CA

**Solicitation Number: VA10112I0169**

Agency: Department of Veterans Affairs

Office: VA Office of Construction & Facilities Management

Location: Department of Veterans Affairs Office of Facilities Management

---

**Notice Type:**
Presolicitation

**Posted Date:**
September 7, 2012

**Response Date:**
September 24, 2012

**Archiving Policy:**
Automatic, on specified date

**Archive Date:**
January 1, 2013

**Original Set Aside:**
N/A

**Set Aside:**
N/A

**Classification Code:**
N -- Installation of equipment

**NAICS Code:**
531 -- Real Estate/531120 -- Lessors of Nonresidential Buildings (except Miniwarehouses)

---

**Synopsis:**
Added: Sep 07, 2012 4:27 pm
X---San Jose, California

The Department of Veterans Affairs Seeks Expressions of Interest for 60,000 to 72,000 Net Usable Square Feet of Clinic Space in San Jose, CA

General Information

Document type: Presolicitation Notice

Solicitation Number:

Posted Date: September XX, 2012

Original Response Date: September XX, 2012

Current Response Date: ---

ATTACMENT 1

Original Response Date: ---

Original Archive Date: ---

Current Archive Date: ---

Classification Code: X-Lease or rental of facilities

Set Aside: N/A

Contracting Office Address

Department of Veterans Affairs, Office of Construction & Facilities Management (003C1E), 425 I Street, NW, Washington, DC 20001

Description:

The United States Government, Department of Veterans Affairs (VA) is seeking to lease between 60,000 and 72,000 net usable square feet (NUSF) of space for use by VA as an Outpatient Clinic in San Jose, California. VA will consider both existing building space and/or land for new construction of a build-to-suit building.

If the space is existing, it must be located on no more than four (4) contiguous floors; first floor space is preferred. Space must be contiguous, with an open floor plan, and can be provided by modifying existing space. If space offered is on multiple floors, a minimum of three passenger and one combination (passenger/freight) elevators must be provided. Net usable square feet does not include such areas as stairs, elevators, mechanical and utility rooms, ducts, shafts, vestibules, public corridors and public toilets required by local code. The building must meet certain security requirements as set forth in the Interagency Security Committee Standards and the Department of Justice Security Standards. Newly constructed buildings must comply with VA's Life Safety Protected Physical Security Design Manual. The building must be constructed of masonry, concrete, or steel framing.

If land is offered it must be able to accommodate the desired square footage, security setbacks, and parking requirements as noted below. For land VA prefers to enter into an assignable option to purchase.

For both the existing building and land scenario an on-site parking lot must accommodate the greater of: (i) local code required pro-rata share of parking allotted to the building for the duration of the lease term or (ii) a minimum of five hundred and twenty (520) dedicated, standard sized, parking spaces. The building and parking area must be fully accessible meeting all requirements of Architectural Barriers Act Accessibility Standards (ABAAS), with a minimum of ten (10) percent assigned for handicapped parking.

ATTACMENT 1

EXPRESSIONS OF INTEREST SHOULD INCLUDE THE FOLLOWING INFORMATION, AS KNOWN OR AVAILABLE. PLEASE NOTE THAT TIME IS OF THE ESSENCE, PLEASE PROVIDE AS MUCH INFORMATION AS POSSIBLE TO ENABLE VA TO EVALUATE YOUR OFFERED PROPERTY VA RESERVES THE RIGHT TO ELIMINATE A PROPERTY THAT FAILS TO PROVIDE SUFFICIENT INFORMATION.

For All Existing Building and Land Sites:

(1) Site address or location description and legal description

(2) Location on map demonstrating the site is within the delineated area

(3) Ingress/egress to street(s)

(4) Evidence of proper zoning for medical office use

(5) FEMA map evidencing that the property lies outside the 100-year floodplain

(6) Narrative and map depicting proximity to the nearest bus and/or train stop

(7) Access to site from major transportation routes

(8) Brokers or legal representatives must show written acknowledgement and permission to represent property

(9) Property Owners and/or developers must provide written proof of ownership or non-contingent control of property at the time of submission of initial bids

(10) Specific information on site ownership and any known title issues, defects, deed restrictions and encumbrances.

(11) Describe any future development affecting the site including neighboring projects and road/public utility line construction.

In addition:

For Land Sites:

(1) Size of parcel, amount (or range) of usable acreage offered, and an indication on how the parcel acreage meets the needs described above

(2) Site plan, survey and/or plat map of the site indicating the location of the parcel offered. Site plan should include location of utilities, any easements (above and below ground), adjacent roads, and/or other encumbrances affecting

**MARKET SURVEY AND SITE EVALUATION REPORT**
**San Jose, CA**
**April 17-18, 2013**

**PURPOSE:** Conduct a market survey and evaluation of properties offered in response to an advertisement that was posted on FedBizOpps on January 30 through February 22, 2013. The ad detailed VA's desire to lease between 60,000 and 72,000 net usable square feet (NUSF) of space in an existing building or in a build-to-suit facility on developer land . The delineated area, as outlined in the ad, encompassed a large portion of the South Bay/San Jose area. To be considered, land sites were required to be capable of accommodating a three story structure, 72,000 net square feet in size with on-site parking for approximately 520 vehicles. Sites were also required to meet the current security setbacks. Existing buildings that met the requirement were included in the considerations. A copy of the advertisement and delineated area map are included as Attachment No. 1.

**MARKET SURVEY PARTICIPANTS:**

| | |
|---|---|
| *Mr. Mark Herman | Cannon Design |
| *Mr. Jason Nietupski, | Palo Alto, CA VAMC |
| *Mr. Max Evans, | Palo Alto, CA VAMC |
| *Dr. John Chardos, | Palo Alto, CA VAMC |
| *Mr. Steve Elliot, | Palo Alto, CA VAMC |
| Mr. Sam Perminter, | Project Manager, VACO |
| Mr. Andrew Lamendola, | Resident Engineer, VACO |
| Mr. Brad Seifert, | Public Properties |
| Mr. Ed Brennan, | Public Properties |

***** *Denotes Site Evaluation Team Members*

**DISCUSSION:** Responses were received from eight (8) potential offerors to survey a total of seventeen (17) properties. A map identifying the location of each site is attached as Attachment No. 2.

The following is a list of all submitted sites:

| | |
|---|---|
| Site 1 | Great Oaks Blvd & I-85 – ***Land*** |
| Site 2 | 6203 San Ignacio Blvd – ***Building*** |
| Site 3 | San Ignacio – ***Land*** |
| Site 4 | 6835 Via Del Oro – ***Building*** |
| Site 5 | 5883 Rue Ferrari – ***Building*** |
| Site 6 | 302 Enzo Drive – ***Building*** |
| Site 7 | 6001 Silver Creek – ***Land*** |
| Site 8 | 5855 Sliver Creek – ***Land*** |
| Site 9 | Optical Court – ***Building*** |
| Site 10 | 3175 S Winchester – ***Building*** |
| Site 11 | 1290 Parkmoor Avenue – ***Building*** |

| | |
|---|---|
| Site 12 | 440 West Julian – ***Land*** |
| Site 13 | Union Pacific Land – ***Land*** |
| Site 14 | Oakland & 101 – ***Land*** |
| Site 15 | 1532 McLaughlin – ***Land*** |
| Site 16 | 550/570 Meridian Avenue – ***Building*** |
| Site 17 | 2103 North 1st Street – ***Land*** |

Each of the seventeen (17) sites were evaluated and given a score of pass or fail; sites or buildings given a passing score are able to submit a proposal in response to the upcoming solicitation. The pass/fail score was based on a list of criteria. These evaluation factors are listed in the attached document –Market Survey Site Criteria (Attachment No. 3).

## SCORES

The following is a summary of the scores for the evaluated sites:

| | | |
|---|---|---|
| Site 1 | Great Oaks Blvd & I-85 – ***Land*** | **PASS** |
| Site 2 | 6203 San Ignacio Blvd – ***Building*** | **FAIL** |
| Site 3 | San Ignacio – ***Land*** | **PASS** |
| Site 4 | 6835 Via Del Oro – ***Building*** | **FAIL** |
| Site 5 | 5883 Rue Ferrari – ***Building*** | **FAIL** |
| Site 6 | 302 Enzo Drive – ***Building*** | **FAIL** |
| Site 7 | 6001 Silver Creek – ***Land*** | **PASS** |
| Site 8 | 5855 Sliver Creek – ***Land*** | **PASS** |
| Site 9 | Optical Court – ***Building*** | **FAIL** |
| Site 10 | 3175 S Winchester – ***Building*** | **FAIL** |
| Site 11 | 1290 Parkmoor Avenue – ***Building*** | **FAIL** |
| Site 12 | 440 West Julian – ***Land*** | **PASS** |
| Site 13 | Union Pacific Land – ***Land*** | **FAIL** |
| Site 14 | Oakland & 101 – ***Land*** | **FAIL** |
| Site 15 | 1532 McLaughlin – ***Land*** | **FAIL** |
| Site 16 | 550/570 Meridian Avenue – ***Building*** | **PASS** |
| Site 17 | 2103 North 1st Street – ***Land*** | **PASS** |

## SITE OVERVIEWS

| Site 1 | Great Oaks Blvd & I-85 |
|---|---|

This site is bound by Great Oaks Boulevard on the east and by Interstate 85 on the south and west. The site has great frontage along Interstate 85 and is easily accessible from the Cottle Road and Great Oaks Boulevard exits. The site is part of a larger 50 acre parcel; adjacent uses will be big-box retail and multifamily residential. Public transportation on CalTrains is less than a ¼ mile from the site. Existing amenities are less than a mile drive; these amenities include fast food, gas stations, cleaners, and many others.

| Site 2 | 6203 San Ignacio Boulevard |
|---|---|

This 116,779 RSF building is located in a business park at the intersection of Highway 101 and Interstate 85. The building was formally occupied by the State Pension Guaranty Fund. The site is over 7 acres and has approximately 450 existing parking spaces; approximately 100 of the spaces are underground. The buildings column spacing limits its ability to house VA's planned use. Additionally the ceiling heights may not allow HVAC and other above ceiling systems.

| Site 3 | San Ignacio Land |
|---|---|

The San Ignacio Land Site is located in close proximity to Sites 1 & 2. The parcel is approximately 30 acres; the VA would likely take eight acres at the corner of San Ignacio and Via Del Oro. The land is adjacent to an existing office park and is less than ¼ mile from the Santa Teresa CalTrains stop. Though not right off the highway, the site is easily accessed off Interstate 85 by using the Great Oaks Boulevard exit. Amenities are located within ½ mile of the site.

| Site 4 | 6835 Via Del Oro |
|---|---|

6835 Via Del Oro is a single-story 99,576 flex building. The building does not meet VA's standards and would need to be demolished. The site is mid-block and does not have adequate ingress/egress.

| Site 5 | 5883 Rue Ferrari |
|---|---|

5883 Rue Ferrari is an existing building totaling 95,760 RSF; in addition the site totals 6.14 acres and has approximately 400 parking spaces. The building was constructed in 1986 and since that time has not received a major renovation; as such the building systems are dated. The building currently has one elevator. Public transportation and amenities are not in close proximity of the site.

| Site 6 | 302 Enzo Drive |
|---|---|

302 Enzo Drive is a 91,866 RSF Flex/RD building. The building is part of a small office park and sits on a 5.90 acre site. Constructed in 2001, the tilt-up building is not aesthetically pleasing and has a limited window line. Though the ceilings are high the buildings floor load may not be able to support VA's equipment. Further the building may not be able to meet the requirement of 72,000 NUSF. Public transportation and amenities are not in close proximity of the site. Additionally the building is set in the back of the office park and is not easy to locate.

| Site 7 | 6001 Silver Creek |
|---|---|

Similar to Site 3, 6001 Silver Creek consists of 30 acres of which the VA would likely need seven to ten. The site is located in close proximity to Highway 101 and is easily accessible off the Silver Creek exit; it is one of the last undeveloped tracks of land and is surrounded by office and, to a lesser extent, retail development. The site is accessible on public transportation via a circulator that runs from the Santa Teresa CalTains stop.

| Site 8 | 5855 Silver Creek |
|---|---|

The site located at 5855 Silver Creek sits directly on Highway 101 and is visible to travelers both northbound and southbound. The 8.8 acres site can be accessed from 101 on the Silver Creek exit; once off the highway the site is less than 0.2 miles. The site is accessible on public transportation via a circulator that runs from the Santa Teresa CalTains stop. A limited number of amenities are located within ½ mile of the site.

| Site 9 | Optical Court |
|---|---|

Optical Court is an existing office park consisting of multiple Flex/RD buildings. The proposed property would combine two adjacent buildings by adding a courtyard/lobby area. Each building is approximately 59,000 RSF; the facility would total slightly less than 120,000 RSF. The buildings are currently in shell condition. The site is accessible on public transportation via a circulator that runs from the Santa Teresa CalTains stop. A limited number of amenities are located within ½ mile of the site.

| Site 10 | 3175 South Winchester |
|---|---|

3175 South Winchester is an existing building consisting of 61,424 RSF. The building is not large enough to accommodate VA's space need. Further the sites size will not allow future development.

| Site 11 | 1290 Parkmoor Avenue |
|---|---|

This 68,600 RSF building fronts Interstate 280; from the highway the building is easily accessible from the Meridian Avenue exit. The buildings size limits VA's program while the lot will require a structure to accommodate VA's parking needs. The building currently has one elevator meaning additional rentable square-footage will be used for non-programmable space. Public transportation is less than ¼ mile from the site. A limited number of amenities are within a mile of the property.

| Site 12 | 440 West Julian |
|---|---|

The site located at 440 West Julian currently consists of two structures and a large parking lot. The property is in downtown San Jose and within close proximity to ample amenities as well as public transportation; the site is also adjacent to a park. The site totals approximately 5.81 acres which can accommodate the building and required parking (likely in a structure).

| Site 13 | Union Pacific Land |
|---|---|

Consisting of 9.702 acres the Union Pacific Site is located adjacent to Highway 87 in downtown San Jose. Though the sites location is appealing, access and adjacent land uses are not. The site borders both an electrical substation and the Union Pacific train tracks. Furthermore access to the site is extremely limited.

| Site 14 | Oakland & 101 |
|---|---|

101 & Oakland is a 9.2 acre site currently consisting of light industrial buildings and wareyard. The property sits directly off the Oakland Street exit from Highway 101 and the sites height makes it visible on 101 from both directions. With light industrial uses surrounding the area a medical facility would not fit in well. Significant zoning changes would be required and access to the redeveloped site would be difficult.

| Site 15 | 1532 McLaughlin Avenue |
|---|---|

1532 McLaughlin Avenue is currently used as a church and small school. The church would be willing to sell five acres to a developer. The location is located some distance from the highway and in comparison to other sites is difficult to find. The adjacent uses are residential. Limited amenities are a located within ½ mile of the site and the bus route could add a stop at the site.

| Site 16 | 550/570 Meridian Avenue |
|---|---|

Currently two identical office buildings – each 77,389 RSF – this site offers potential for use of both the existing building and adjacent property. In addition to the buildings the site has a parking garage with over 500 spaces. The building's owners also control an adjacent 60,000 RSF building and additional acreage. The building is less than ¼ from Interstate 280 and the Race Street CalTrains stop. Amenities are within ½ mile of the site.

| | |
|---|---|
| Site 17 | 2103 North 1st Street |

A former Avis car rental facility this site offers over 500 feet of frontage on Highway 101 and 200 feet of frontage on North First Street. The sites central location offers great re-use potential while providing access to public transportation and amenities; the site is directly adjacent to the Karina Court Light Rail Station. Surrounding uses are compatible with VA's use.

**PREFERRED SITES:**
Following the market tour Public Properties compiled all site scores provided by the market survey team; additionally all notes were transcribed. As outlined above the market survey team found the following sites acceptable:

1. Great Oaks Boulevard & I-85
2. San Ignacio Land Site
3. 6001 Silver Creek
4. 5855 Silver Creek
5. 440 West Julian
6. 550/570 Meridian Avenue
7. 2103 North 1st Street

**RECCOMENDATIONS:**
It is the recommendation of the Market Survey Team that representatives from each of the sites listed above receive a letter notifying them that their site has been approved and that they will receive the solicitation documents once they are finalized. Representatives of sites that have not been approved will receive a letter notifying them that their site is no longer being considered and offers for these sites will not be accepted.

**CONCLUSION:**
It is the determination of the Contracting Officer to accept the recommendation of the Site Evaluation Team, and move forward with issuance of letters and development of the solicitation documents. As this is a "one-step" project site due diligence will be the responsibility of the offeror.

**Signatures on Following Page**

Attachments

Prepared by: Public Properties for Department of Veterans Affairs, Real Property Service

Concurrence: _____ Date: _____
Sam Perminter, Realty Specialist (003C1E)

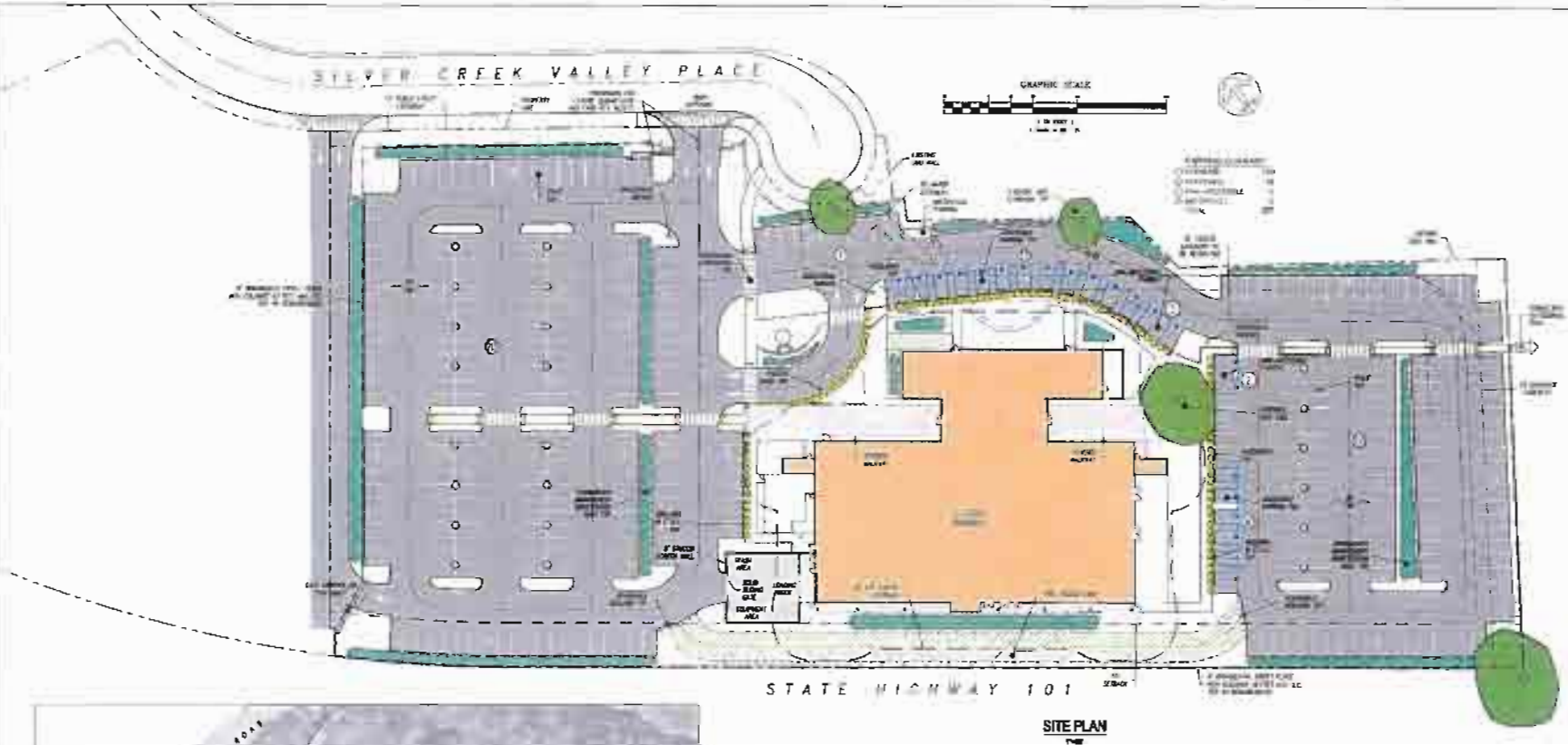
Concurrence: _____ Date: _____
Hong Hitchings, Contracting Officer (003C1E)

Concurrence: _____ Date: _____
Jessica Kaplan, Acting Director (003C1E)

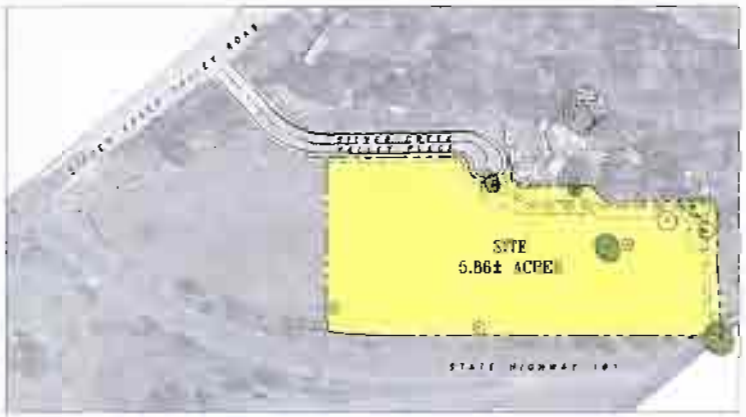
Concurrence: _____ Date: _____
Director, VAMC Palo Alto

# APPENDIX B

SILVER CREEK VALLEY PLACE PRELIMINARY SITE PLAN




SITE PLAN




EXISTING SITE

GENERAL NOTES

KEY NOTES

KEY PLAN

SCHEMATIC DESIGN
PRELIMINARY

CONSULTANTS:

BKF

ARCHITECT/ENGINEERS:

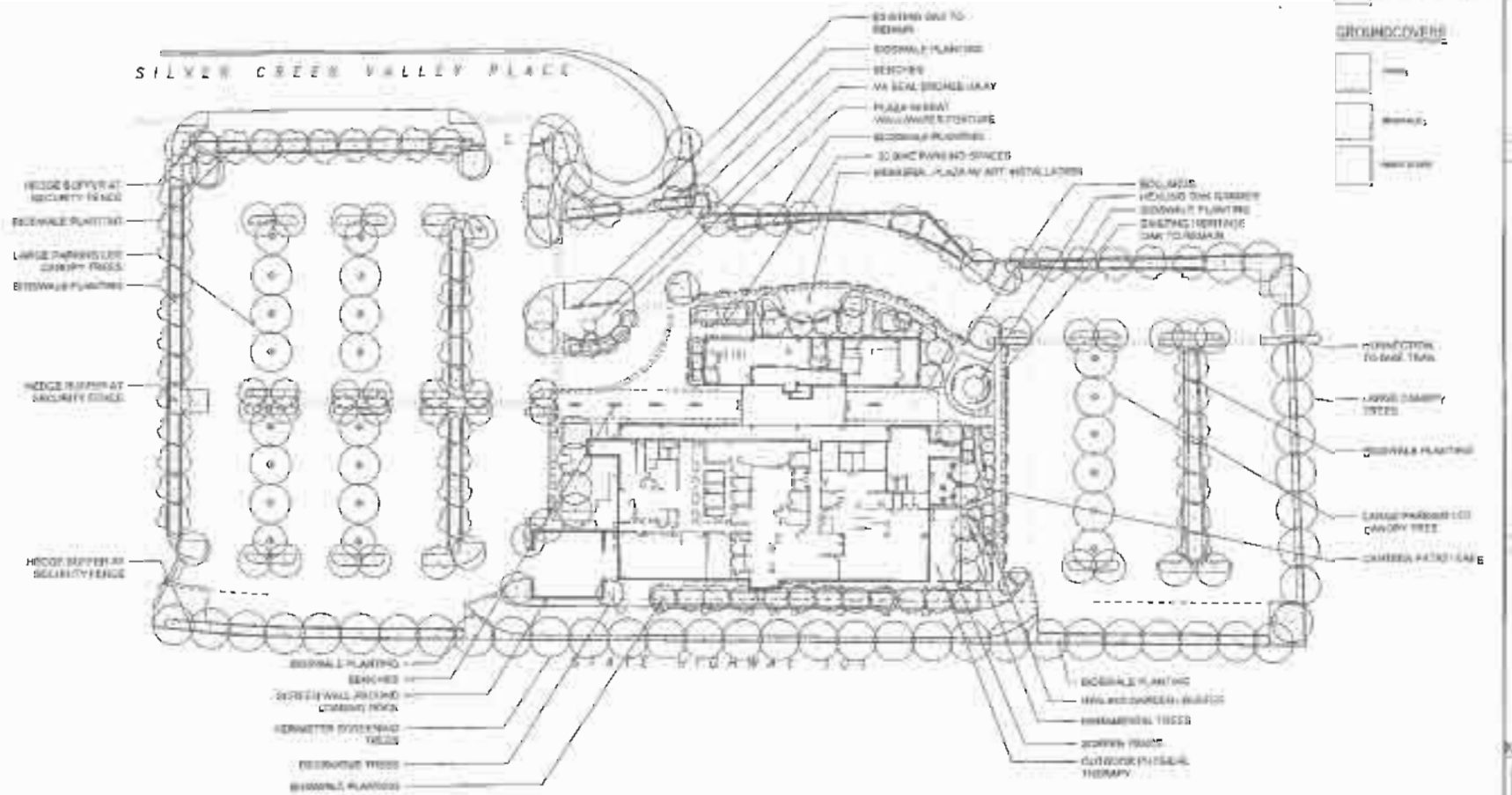
THE DESIGN PARTNERSHIP LLP
Architects Planners

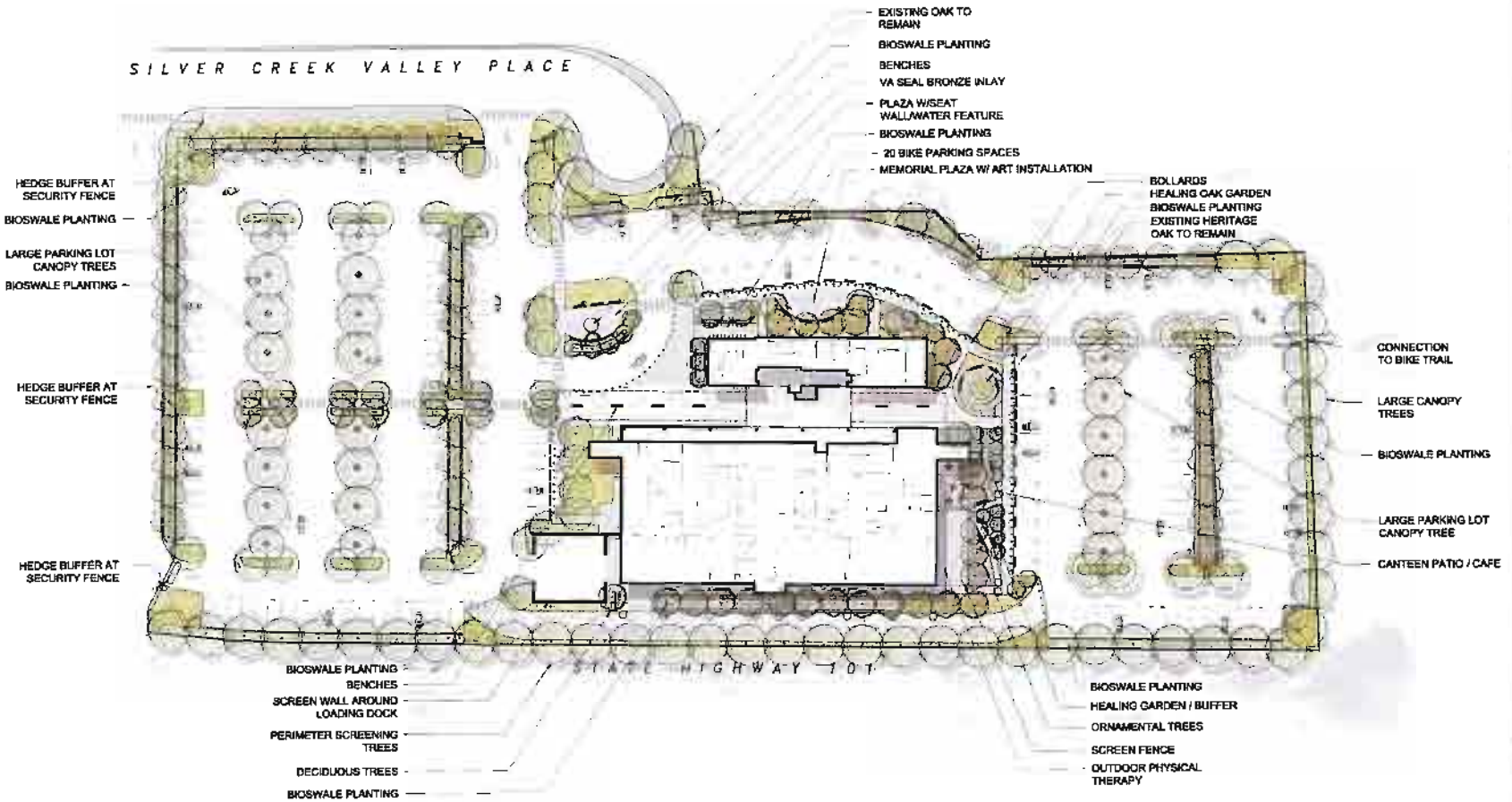
CIVIL SITE PLAN

VA SAN JOSE COMMUNITY BASED OUTPATIENT CLINIC

AUGUST 18, 2017

C0101


SILVER CREEK VALLEY PLACE
PAVING MATERIALS
GROUNDCOVERS
KEY PLAN
scale: 1"=30'-0"
PRELIMINARY
CONSULTANTS:
ARCHITECTS/ENGINEERS:
THE DESIGN PARTNERSHIP LLP
Architects + Planners
REAL PROPERTY SERVICE




GENERAL NOTES

KEY NOTES

LEGEND

KEY PLAN

scale: 1"=30'-0"

PRELIMINARY

CONSULTANTS:

rhaa

ARCHITECT/ENGINEERS:

THE DESIGN PARTNERSHIP LLP

Architects + Planners

Drawing Title

Approved Project Director

Project Title

Location

VA Project Number

DPW Project Number

Drawing No.

Department of Veterans Affairs

# APPENDIX C

AIR QUALITY AND GREENHOUSE GAS
SUPPORTING INFORMATION

# San Jose VA - Silver Creek Site

**Santa Clara County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 95.13 | 1000sqft | 5.86 | 95,127.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 58 |
| **Climate Zone** | 4 | | | **Operational Year** | 2014 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Land Use - S.f. (assume same as San Ignacio or less) and acreage from plan drawings.

Construction Phase - Start date 6/15/2015. Building Construction 8/15/2015 - 10/15/2016.

Trips and VMT - 0.3 mile trip lengths to calculate risk from on-site vehicle travel.

Demolition - 100 s.f. shed.

Grading - Assume 10,000 CY soil export.

Construction Off-road Equipment Mitigation - Tier 2 engines for equipment >50 hp. Tier 4 air compressors, concrete saws, forklifts, generator sets, tractors/loaders/backhoes. BAAQMD BMPs.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 6.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 10.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstructionPhase | NumDays | 230.00 | 305.00 |
| tblConstructionPhase | PhaseEndDate | 9/23/2016 | 10/15/2016 |
| tblConstructionPhase | PhaseEndDate | 7/24/2015 | 6/26/2015 |
| tblConstructionPhase | PhaseStartDate | 7/25/2015 | 8/15/2015 |
| tblConstructionPhase | PhaseStartDate | 7/11/2015 | 6/15/2015 |
| tblGrading | MaterialExported | 0.00 | 10,000.00 |
| tblLandUse | LandUseSquareFeet | 95,130.00 | 95,127.00 |
| tblLandUse | LotAcreage | 2.18 | 5.86 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |

| | | | |
|---|---|---|---|
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |

## 2.0 Emissions Summary

### 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2015 | 0.3106 | 2.6983 | 1.9894 | 2.2700e-003 | 0.1573 | 0.1683 | 0.3256 | 0.0837 | 0.1573 | 0.2409 | 0.0000 | 209.5891 | 209.5891 | 0.0547 | 0.0000 | 210.7369 |
| 2016 | 0.8938 | 3.2253 | 2.2898 | 3.0800e-003 | 1.2400e-003 | 0.2175 | 0.2187 | 3.5000e-004 | 0.2042 | 0.2045 | 0.0000 | 278.2396 | 278.2396 | 0.0687 | 0.0000 | 279.6824 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.2044** | **5.9236** | **4.2792** | **5.3500e-003** | **0.1585** | **0.3857** | **0.5443** | **0.0840** | **0.3614** | **0.4454** | **0.0000** | **487.8288** | **487.8288** | **0.1234** | **0.0000** | **490.4193** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2015 | 0.0906 | 0.9678 | 1.7026 | 2.2700e-003 | 0.0712 | 0.0285 | 0.0998 | 0.0190 | 0.0285 | 0.0475 | 0.0000 | 209.5889 | 209.5889 | 0.0547 | 0.0000 | 210.7367 |
| 2016 | 0.6211 | 0.9569 | 2.2879 | 3.0800e-003 | 1.2400e-003 | 0.0337 | 0.0349 | 3.5000e-004 | 0.0337 | 0.0340 | 0.0000 | 278.2393 | 278.2393 | 0.0687 | 0.0000 | 279.6821 |
| **Total** | **0.7117** | **1.9247** | **3.9905** | **5.3500e-003** | **0.0725** | **0.0622** | **0.1347** | **0.0194** | **0.0622** | **0.0815** | **0.0000** | **487.8282** | **487.8282** | **0.1234** | **0.0000** | **490.4187** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **40.91** | **67.51** | **6.75** | **0.00** | **54.28** | **83.87** | **75.25** | **76.96** | **82.80** | **81.70** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 6/15/2015 | 7/10/2015 | 5 | 20 | |
| 2 | Site Preparation | Site Preparation | 6/15/2015 | 6/26/2015 | 5 | 10 | |
| 3 | Grading | Grading | 6/27/2015 | 7/24/2015 | 5 | 20 | |
| 4 | Building Construction | Building Construction | 8/15/2015 | 10/15/2016 | 5 | 305 | |
| 5 | Paving | Paving | 10/16/2016 | 11/11/2016 | 5 | 20 | |
| 6 | Architectural Coating | Architectural Coating | 11/12/2016 | 12/9/2016 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 142,691; Non-Residential Outdoor: 47,564 (Architectural Coating –**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 162 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 255 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 255 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 1 | 8.00 | 162 | 0.38 |
| Grading | Graders | 1 | 8.00 | 174 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 255 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 226 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 125 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 130 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

## Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Grading | 6 | 15.00 | 0.00 | 1,250.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 30.00 | 16.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

## 3.2 Demolition - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 5.0000e-005 | 0.0000 | 5.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0451 | 0.4836 | 0.3607 | 4.0000e-004 | | 0.0245 | 0.0245 | | 0.0229 | 0.0229 | 0.0000 | 37.4413 | 37.4413 | 0.0102 | 0.0000 | 37.6544 |
| **Total** | **0.0451** | **0.4836** | **0.3607** | **4.0000e-004** | **5.0000e-005** | **0.0245** | **0.0246** | **1.0000e-005** | **0.0229** | **0.0229** | **0.0000** | **37.4413** | **37.4413** | **0.0102** | **0.0000** | **37.6544** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **4.3000e-004** | **1.1000e-004** | **1.5000e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0613** | **0.0613** | **1.0000e-005** | **0.0000** | **0.0614** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0111 | 0.2879 | 0.2527 | 4.0000e-004 | | 7.4200e-003 | 7.4200e-003 | | 7.4200e-003 | 7.4200e-003 | 0.0000 | 37.4412 | 37.4412 | 0.0102 | 0.0000 | 37.6544 |
| **Total** | **0.0111** | **0.2879** | **0.2527** | **4.0000e-004** | **2.0000e-005** | **7.4200e-003** | **7.4400e-003** | **0.0000** | **7.4200e-003** | **7.4200e-003** | **0.0000** | **37.4412** | **37.4412** | **0.0102** | **0.0000** | **37.6544** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **4.3000e-004** | **1.1000e-004** | **1.5000e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0613** | **0.0613** | **1.0000e-005** | **0.0000** | **0.0614** |

## 3.3 Site Preparation - 2015

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0903 | 0.0000 | 0.0903 | 0.0497 | 0.0000 | 0.0497 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0263 | 0.2845 | 0.2132 | 2.0000e-004 | | 0.0154 | 0.0154 | | 0.0142 | 0.0142 | 0.0000 | 18.6506 | 18.6506 | 5.5700e-003 | 0.0000 | 18.7675 |
| **Total** | **0.0263** | **0.2845** | **0.2132** | **2.0000e-004** | **0.0903** | **0.0154** | **0.1058** | **0.0497** | **0.0142** | **0.0639** | **0.0000** | **18.6506** | **18.6506** | **5.5700e-003** | **0.0000** | **18.7675** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.6000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0368 | 0.0368 | 0.0000 | 0.0000 | 0.0369 |
| **Total** | **2.6000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0368** | **0.0368** | **0.0000** | **0.0000** | **0.0369** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0407 | 0.0000 | 0.0407 | 0.0112 | 0.0000 | 0.0112 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0000e-003 | 0.1153 | 0.1170 | 2.0000e-004 | | 2.4800e-003 | 2.4800e-003 | | 2.4800e-003 | 2.4800e-003 | 0.0000 | 18.6505 | 18.6505 | 5.5700e-003 | 0.0000 | 18.7675 |
| **Total** | **4.0000e-003** | **0.1153** | **0.1170** | **2.0000e-004** | **0.0407** | **2.4800e-003** | **0.0431** | **0.0112** | **2.4800e-003** | **0.0137** | **0.0000** | **18.6505** | **18.6505** | **5.5700e-003** | **0.0000** | **18.7675** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.6000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0368 | 0.0368 | 0.0000 | 0.0000 | 0.0369 |
| **Total** | **2.6000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0368** | **0.0368** | **0.0000** | **0.0000** | **0.0369** |

## 3.4 Grading - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 0.0661 | 0.0000 | 0.0661 | 0.0338 | 0.0000 | 0.0338 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0383 | 0.4042 | 0.2667 | 3.0000e-004 | | 0.0233 | 0.0233 | | 0.0214 | 0.0214 | 0.0000 | 28.3860 | 28.3860 | 8.4700e-003 | 0.0000 | 28.5639 |
| **Total** | **0.0383** | **0.4042** | **0.2667** | **3.0000e-004** | **0.0661** | **0.0233** | **0.0894** | **0.0338** | **0.0214** | **0.0552** | **0.0000** | **28.3860** | **28.3860** | **8.4700e-003** | **0.0000** | **28.5639** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.2000e-003 | 0.0176 | 0.1079 | 2.0000e-005 | 1.7000e-004 | 1.1000e-004 | 2.8000e-004 | 5.0000e-005 | 1.0000e-004 | 1.5000e-004 | 0.0000 | 1.6485 | 1.6485 | 4.0000e-005 | 0.0000 | 1.6493 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **7.6300e-003** | **0.0177** | **0.1094** | **2.0000e-005** | **2.0000e-004** | **1.1000e-004** | **3.2000e-004** | **6.0000e-005** | **1.0000e-004** | **1.6000e-004** | **0.0000** | **1.7098** | **1.7098** | **5.0000e-005** | **0.0000** | **1.7108** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0297 | 0.0000 | 0.0297 | 7.6000e-003 | 0.0000 | 7.6000e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7500e-003 | 0.1773 | 0.2038 | 3.0000e-004 | | 4.7400e-003 | 4.7400e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 28.3859 | 28.3859 | 8.4700e-003 | 0.0000 | 28.5639 |
| **Total** | **7.7500e-003** | **0.1773** | **0.2038** | **3.0000e-004** | **0.0297** | **4.7400e-003** | **0.0345** | **7.6000e-003** | **4.7400e-003** | **0.0123** | **0.0000** | **28.3859** | **28.3859** | **8.4700e-003** | **0.0000** | **28.5639** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.2000e-003 | 0.0176 | 0.1079 | 2.0000e-005 | 1.7000e-004 | 1.1000e-004 | 2.8000e-004 | 5.0000e-005 | 1.0000e-004 | 1.5000e-004 | 0.0000 | 1.6485 | 1.6485 | 4.0000e-005 | 0.0000 | 1.6493 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **7.6300e-003** | **0.0177** | **0.1094** | **2.0000e-005** | **2.0000e-004** | **1.1000e-004** | **3.2000e-004** | **6.0000e-005** | **1.0000e-004** | **1.6000e-004** | **0.0000** | **1.7098** | **1.7098** | **5.0000e-005** | **0.0000** | **1.7108** |

## 3.5 Building Construction - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1811 | 1.4865 | 0.9279 | 1.3300e-003 | | 0.1048 | 0.1048 | | 0.0985 | 0.0985 | 0.0000 | 120.7772 | 120.7772 | 0.0303 | 0.0000 | 121.4136 |
| **Total** | **0.1811** | **1.4865** | **0.9279** | **1.3300e-003** | | **0.1048** | **0.1048** | | **0.0985** | **0.0985** | **0.0000** | **120.7772** | **120.7772** | **0.0303** | **0.0000** | **121.4136** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.2100e-003 | 0.0206 | 0.0942 | 2.0000e-005 | 2.3000e-004 | 1.3000e-004 | 3.6000e-004 | 7.0000e-005 | 1.2000e-004 | 1.9000e-004 | 0.0000 | 1.9195 | 1.9195 | 3.0000e-005 | 0.0000 | 1.9202 |
| Worker | 4.2300e-003 | 1.0900e-003 | 0.0149 | 1.0000e-005 | 3.4000e-004 | 1.0000e-005 | 3.6000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.6068 | 0.6068 | 7.0000e-005 | 0.0000 | 0.6083 |
| **Total** | **0.0114** | **0.0217** | **0.1091** | **3.0000e-005** | **5.7000e-004** | **1.4000e-004** | **7.2000e-004** | **1.6000e-004** | **1.3000e-004** | **3.0000e-004** | **0.0000** | **2.5263** | **2.5263** | **1.0000e-004** | **0.0000** | **2.5285** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0480 | 0.3478 | 0.9083 | 1.3300e-003 | | 0.0136 | 0.0136 | | 0.0136 | 0.0136 | 0.0000 | 120.7771 | 120.7771 | 0.0303 | 0.0000 | 121.4134 |
| **Total** | **0.0480** | **0.3478** | **0.9083** | **1.3300e-003** | | **0.0136** | **0.0136** | | **0.0136** | **0.0136** | **0.0000** | **120.7771** | **120.7771** | **0.0303** | **0.0000** | **121.4134** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.2100e-003 | 0.0206 | 0.0942 | 2.0000e-005 | 2.3000e-004 | 1.3000e-004 | 3.6000e-004 | 7.0000e-005 | 1.2000e-004 | 1.9000e-004 | 0.0000 | 1.9195 | 1.9195 | 3.0000e-005 | 0.0000 | 1.9202 |
| Worker | 4.2300e-003 | 1.0900e-003 | 0.0149 | 1.0000e-005 | 3.4000e-004 | 1.0000e-005 | 3.6000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.6068 | 0.6068 | 7.0000e-005 | 0.0000 | 0.6083 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0114** | **0.0217** | **0.1091** | **3.0000e-005** | **5.7000e-004** | **1.4000e-004** | **7.2000e-004** | **1.6000e-004** | **1.3000e-004** | **3.0000e-004** | **0.0000** | **2.5263** | **2.5263** | **1.0000e-004** | **0.0000** | **2.5285** |

## 3.5 Building Construction - 2016

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.3508 | 2.9362 | 1.9062 | 2.7600e-003 | | 0.2026 | 0.2026 | | 0.1904 | 0.1904 | 0.0000 | 249.4182 | 249.4182 | 0.0619 | 0.0000 | 250.7173 |
| **Total** | **0.3508** | **2.9362** | **1.9062** | **2.7600e-003** | | **0.2026** | **0.2026** | | **0.1904** | **0.1904** | **0.0000** | **249.4182** | **249.4182** | **0.0619** | **0.0000** | **250.7173** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.0394 | 0.1870 | 5.0000e-005 | 4.8000e-004 | 2.1000e-004 | 6.9000e-004 | 1.4000e-004 | 2.0000e-004 | 3.4000e-004 | 0.0000 | 3.9513 | 3.9513 | 6.0000e-005 | 0.0000 | 3.9526 |
| Worker | 8.1300e-003 | 2.0100e-003 | 0.0278 | 2.0000e-005 | 7.1000e-004 | 3.0000e-005 | 7.4000e-004 | 1.9000e-004 | 3.0000e-005 | 2.2000e-004 | 0.0000 | 1.2202 | 1.2202 | 1.3000e-004 | 0.0000 | 1.2230 |
| **Total** | **0.0218** | **0.0414** | **0.2147** | **7.0000e-005** | **1.1900e-003** | **2.4000e-004** | **1.4300e-003** | **3.3000e-004** | **2.3000e-004** | **5.6000e-004** | **0.0000** | **5.1714** | **5.1714** | **1.9000e-004** | **0.0000** | **5.1755** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0933 | 0.7170 | 1.8837 | 2.7600e-003 | | 0.0268 | 0.0268 | | 0.0268 | 0.0268 | 0.0000 | 249.4179 | 249.4179 | 0.0619 | 0.0000 | 250.7170 |
| **Total** | **0.0933** | **0.7170** | **1.8837** | **2.7600e-003** | | **0.0268** | **0.0268** | | **0.0268** | **0.0268** | **0.0000** | **249.4179** | **249.4179** | **0.0619** | **0.0000** | **250.7170** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.0394 | 0.1870 | 5.0000e-005 | 4.8000e-004 | 2.1000e-004 | 6.9000e-004 | 1.4000e-004 | 2.0000e-004 | 3.4000e-004 | 0.0000 | 3.9513 | 3.9513 | 6.0000e-005 | 0.0000 | 3.9526 |
| Worker | 8.1300e-003 | 2.0100e-003 | 0.0278 | 2.0000e-005 | 7.1000e-004 | 3.0000e-005 | 7.4000e-004 | 1.9000e-004 | 3.0000e-005 | 2.2000e-004 | 0.0000 | 1.2202 | 1.2202 | 1.3000e-004 | 0.0000 | 1.2230 |
| **Total** | **0.0218** | **0.0414** | **0.2147** | **7.0000e-005** | **1.1900e-003** | **2.4000e-004** | **1.4300e-003** | **3.3000e-004** | **2.3000e-004** | **5.6000e-004** | **0.0000** | **5.1714** | **5.1714** | **1.9000e-004** | **0.0000** | **5.1755** |

## 3.6 Paving - 2016

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.0209 | 0.2239 | 0.1482 | 2.2000e-004 | | 0.0126 | 0.0126 | | 0.0116 | 0.0116 | 0.0000 | 21.0138 | 21.0138 | 6.3400e-003 | 0.0000 | 21.1469 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0209** | **0.2239** | **0.1482** | **2.2000e-004** | | **0.0126** | **0.0126** | | **0.0116** | **0.0116** | **0.0000** | **21.0138** | **21.0138** | **6.3400e-003** | **0.0000** | **21.1469** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.9000e-004 | 1.0000e-004 | 1.3500e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0592 | 0.0592 | 1.0000e-005 | 0.0000 | 0.0594 |
| **Total** | **3.9000e-004** | **1.0000e-004** | **1.3500e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0592** | **0.0592** | **1.0000e-005** | **0.0000** | **0.0594** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 9.1200e-003 | 0.1970 | 0.1693 | 2.2000e-004 | | 6.5400e-003 | 6.5400e-003 | | 6.5400e-003 | 6.5400e-003 | 0.0000 | 21.0138 | 21.0138 | 6.3400e-003 | 0.0000 | 21.1469 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **9.1200e-003** | **0.1970** | **0.1693** | **2.2000e-004** | | **6.5400e-003** | **6.5400e-003** | | **6.5400e-003** | **6.5400e-003** | **0.0000** | **21.0138** | **21.0138** | **6.3400e-003** | **0.0000** | **21.1469** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.9000e-004 | 1.0000e-004 | 1.3500e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0592 | 0.0592 | 1.0000e-005 | 0.0000 | 0.0594 |
| **Total** | **3.9000e-004** | **1.0000e-004** | **1.3500e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0592** | **0.0592** | **1.0000e-005** | **0.0000** | **0.0594** |

## 3.7 Architectural Coating - 2016

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4960 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.6800e-003 | 0.0237 | 0.0188 | 3.0000e-005 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | 0.0000 | 2.5533 | 2.5533 | 3.0000e-004 | 0.0000 | 2.5596 |
| **Total** | **0.4997** | **0.0237** | **0.0188** | **3.0000e-005** | | **1.9700e-003** | **1.9700e-003** | | **1.9700e-003** | **1.9700e-003** | **0.0000** | **2.5533** | **2.5533** | **3.0000e-004** | **0.0000** | **2.5596** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |
| **Total** | **1.6000e-004** | **4.0000e-005** | **5.4000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0237** | **0.0237** | **0.0000** | **0.0000** | **0.0238** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4960 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.0000e-004 | 1.2900e-003 | 0.0183 | 3.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 2.5533 | 2.5533 | 3.0000e-004 | 0.0000 | 2.5596 |
| **Total** | **0.4963** | **1.2900e-003** | **0.0183** | **3.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | **0.0000** | **2.5533** | **2.5533** | **3.0000e-004** | **0.0000** | **2.5596** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |

# VA SJ CBOC Silver Creek Valley Site

**Bay Area AQMD Air District, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Parking Lot | 387.00 | Space | 3.48 | 154,800.00 | 0 |
| Medical Office Building | 95.13 | 1000sqft | 1.65 | 95,130.00 | 0 |
| Other Asphalt Surfaces | 0.00 | | 0.00 | | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 64 |
| **Climate Zone** | 4 | | | **Operational Year** | 2017 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Project Characteristics -

Land Use - Assume 72,00sf footprint and 0.73 acres landscaping (not a source of substantial operational emissions)

Construction Phase - Operational emissions only

## 2.0 Emissions Summary

### Overall Operational

**Unmitigated Operational**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.0286 | 4.0000e-005 | 4.5100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 8.6100e-003 | 8.6100e-003 | 2.0000e-005 | 0.0000 | 9.1200e-003 |
| Energy | 8.8300e-003 | 0.0803 | 0.0675 | 4.8000e-004 | | 6.1000e-003 | 6.1000e-003 | | 6.1000e-003 | 6.1000e-003 | 0.0000 | 672.5090 | 672.5090 | 0.0281 | 7.0800e-003 | 675.2935 |
| Mobile | 1.5079 | 3.2093 | 14.4538 | 0.0273 | 1.8917 | 0.0408 | 1.9324 | 0.5077 | 0.0375 | 0.5452 | 0.0000 | 2,103.1242 | 2,103.1242 | 0.0890 | 0.0000 | 2,104.9931 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 208.5529 | 0.0000 | 208.5529 | 12.3251 | 0.0000 | 467.3805 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.7871 | 21.1053 | 24.8924 | 0.3899 | 9.3800e-003 | 35.9890 |
| **Total** | **2.5452** | **3.2896** | **14.5257** | **0.0278** | **1.8917** | **0.0469** | **1.9385** | **0.5077** | **0.0436** | **0.5513** | **212.3400** | **2,796.7471** | **3,009.0871** | **12.8322** | **0.0165** | **3,283.6652** |

## Mitigated Operational

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Area | 1.0286 | 4.0000e-005 | 4.5100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 8.6100e-003 | 8.6100e-003 | 2.0000e-005 | 0.0000 | 9.1200e-003 |
| Energy | 8.8300e-003 | 0.0803 | 0.0675 | 4.8000e-004 | | 6.1000e-003 | 6.1000e-003 | | 6.1000e-003 | 6.1000e-003 | 0.0000 | 672.5090 | 672.5090 | 0.0281 | 7.0800e-003 | 675.2935 |
| Mobile | 1.5079 | 3.2093 | 14.4538 | 0.0273 | 1.8917 | 0.0408 | 1.9324 | 0.5077 | 0.0375 | 0.5452 | 0.0000 | 2,103.1242 | 2,103.1242 | 0.0890 | 0.0000 | 2,104.9931 |
| Waste | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 208.5529 | 0.0000 | 208.5529 | 12.3251 | 0.0000 | 467.3805 |
| Water | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 3.7871 | 21.1053 | 24.8924 | 0.3899 | 9.3700e-003 | 35.9830 |
| **Total** | **2.5452** | **3.2896** | **14.5257** | **0.0278** | **1.8917** | **0.0469** | **1.9385** | **0.5077** | **0.0436** | **0.5513** | **212.3400** | **2,796.7471** | **3,009.0871** | **12.8321** | **0.0165** | **3,283.6592** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.06** | **0.00** |

## 4.0 Operational Detail - Mobile

### 4.1 Mitigation Measures Mobile

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.5079 | 3.2093 | 14.4538 | 0.0273 | 1.8917 | 0.0408 | 1.9324 | 0.5077 | 0.0375 | 0.5452 | 0.0000 | 2,103.1242 | 2,103.1242 | 0.0890 | 0.0000 | 2,104.9931 |
| Unmitigated | 1.5079 | 3.2093 | 14.4538 | 0.0273 | 1.8917 | 0.0408 | 1.9324 | 0.5077 | 0.0375 | 0.5452 | 0.0000 | 2,103.1242 | 2,103.1242 | 0.0890 | 0.0000 | 2,104.9931 |

### 4.2 Trip Summary Information

| | Average Daily Trip Rate | | | Unmitigated | Mitigated |
|---|---|---|---|---|---|
| Land Use | Weekday | Saturday | Sunday | Annual VMT | Annual VMT |
| Medical Office Building | 3,437.05 | 852.36 | 147.45 | 5,084,670 | 5,084,670 |
| Parking Lot | 0.00 | 0.00 | 0.00 | | |
| Total | 3,437.05 | 852.36 | 147.45 | 5,084,670 | 5,084,670 |

### 4.3 Trip Type Information

| | Miles | | | Trip % | | | Trip Purpose % | | |
|---|---|---|---|---|---|---|---|---|---|
| Land Use | H-W or C-W | H-S or C-C | H-O or C-NW | H-W or C-W | H-S or C-C | H-O or C-NW | Primary | Diverted | Pass-by |
| Medical Office Building | 9.50 | 7.30 | 7.30 | 29.60 | 51.40 | 19.00 | 60 | 30 | 10 |
| Parking Lot | 9.50 | 7.30 | 7.30 | 0.00 | 0.00 | 0.00 | 0 | 0 | 0 |

| LDA | LDT1 | LDT2 | MDV | LHD1 | LHD2 | MHD | HHD | OBUS | UBUS | MCY | SBUS | MH |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0.546114 | 0.062902 | 0.174648 | 0.122995 | 0.034055 | 0.004856 | 0.015640 | 0.024397 | 0.002087 | 0.003279 | 0.006673 | 0.000688 | 0.001667 |

## 5.0 Energy Detail

### 4.4 Fleet Mix

Historical Energy Use: N

### 5.1 Mitigation Measures Energy

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Electricity Mitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 585.0917 | 585.0917 | 0.0265 | 5.4700e-003 | 587.3441 |
| Electricity Unmitigated | | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 585.0917 | 585.0917 | 0.0265 | 5.4700e-003 | 587.3441 |
| NaturalGas Mitigated | 8.8300e-003 | 0.0803 | 0.0675 | 4.8000e-004 | | 6.1000e-003 | 6.1000e-003 | | 6.1000e-003 | 6.1000e-003 | 0.0000 | 87.4173 | 87.4173 | 1.6800e-003 | 1.6000e-003 | 87.9493 |
| NaturalGas Unmitigated | 8.8300e-003 | 0.0803 | 0.0675 | 4.8000e-004 | | 6.1000e-003 | 6.1000e-003 | | 6.1000e-003 | 6.1000e-003 | 0.0000 | 87.4173 | 87.4173 | 1.6800e-003 | 1.6000e-003 | 87.9493 |

### 5.2 Energy by Land Use - NaturalGas

**Unmitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Medical Office Building | 1.63814e+006 | 8.8300e-003 | 0.0803 | 0.0675 | 4.8000e-004 | | 6.1000e-003 | 6.1000e-003 | | 6.1000e-003 | 6.1000e-003 | 0.0000 | 87.4173 | 87.4173 | 1.6800e-003 | 1.6000e-003 | 87.9493 |

| | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **8.8300e-003** | **0.0803** | **0.0675** | **4.8000e-004** | | **6.1000e-003** | **6.1000e-003** | | **6.1000e-003** | **6.1000e-003** | **0.0000** | **87.4173** | **87.4173** | **1.6800e-003** | **1.6000e-003** | **87.9493** |

**Mitigated**

| | NaturalGas Use | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Land Use | kBTU/yr | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Medical Office Building | 1.63814e+006 | 8.8300e-003 | 0.0803 | 0.0675 | 4.8000e-004 | | 6.1000e-003 | 6.1000e-003 | | 6.1000e-003 | 6.1000e-003 | 0.0000 | 87.4173 | 87.4173 | 1.6800e-003 | 1.6000e-003 | 87.9493 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **8.8300e-003** | **0.0803** | **0.0675** | **4.8000e-004** | | **6.1000e-003** | **6.1000e-003** | | **6.1000e-003** | **6.1000e-003** | **0.0000** | **87.4173** | **87.4173** | **1.6800e-003** | **1.6000e-003** | **87.9493** |

## 5.3 Energy by Land Use - Electricity

**Unmitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Medical Office Building | 1.87501e+006 | 545.4626 | 0.0247 | 5.1000e-003 | 547.5624 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 136224 | 39.6291 | 1.7900e-003 | 3.7000e-004 | 39.7817 |
| **Total** | | **585.0917** | **0.0265** | **5.4700e-003** | **587.3441** |

**Mitigated**

| | Electricity Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | kWh/yr | MT/yr | | | |
| Medical Office Building | 1.87501e+006 | 545.4626 | 0.0247 | 5.1000e-003 | 547.5624 |
| Other Asphalt Surfaces | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Parking Lot | 136224 | 39.6291 | 1.7900e-003 | 3.7000e-004 | 39.7817 |
| **Total** | | **585.0917** | **0.0265** | **5.4700e-003** | **587.3441** |

# 6.0 Area Detail

## 6.1 Mitigation Measures Area

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Mitigated | 1.0286 | 4.0000e-005 | 4.5100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 8.6100e-003 | 8.6100e-003 | 2.0000e-005 | 0.0000 | 9.1200e-003 |
| Unmitigated | 1.0286 | 4.0000e-005 | 4.5100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 8.6100e-003 | 8.6100e-003 | 2.0000e-005 | 0.0000 | 9.1200e-003 |

## 6.2 Area by SubCategory

**Unmitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0520 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.9761 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 4.4000e-004 | 4.0000e-005 | 4.5100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 8.6100e-003 | 8.6100e-003 | 2.0000e-005 | 0.0000 | 9.1200e-003 |
| **Total** | **1.0286** | **4.0000e-005** | **4.5100e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **8.6100e-003** | **8.6100e-003** | **2.0000e-005** | **0.0000** | **9.1200e-003** |

**Mitigated**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SubCategory | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Architectural Coating | 0.0520 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Consumer Products | 0.9761 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Landscaping | 4.4000e-004 | 4.0000e-005 | 4.5100e-003 | 0.0000 | | 2.0000e-005 | 2.0000e-005 | | 2.0000e-005 | 2.0000e-005 | 0.0000 | 8.6100e-003 | 8.6100e-003 | 2.0000e-005 | 0.0000 | 9.1200e-003 |
| **Total** | **1.0286** | **4.0000e-005** | **4.5100e-003** | **0.0000** | | **2.0000e-005** | **2.0000e-005** | | **2.0000e-005** | **2.0000e-005** | **0.0000** | **8.6100e-003** | **8.6100e-003** | **2.0000e-005** | **0.0000** | **9.1200e-003** |

## 7.0 Water Detail

### 7.1 Mitigation Measures Water

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| Category | MT/yr | | | |

| | | | | |
|---|---|---|---|---|
| Mitigated | 24.8924 | 0.3899 | 9.3700e-003 | 35.9830 |
| Unmitigated | 24.8924 | 0.3899 | 9.3800e-003 | 35.9890 |

## 7.2 Water by Land Use

**Unmitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Medical Office Building | 11.937 / 2.27371 | 24.8924 | 0.3899 | 9.3800e-003 | 35.9890 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **24.8924** | **0.3899** | **9.3800e-003** | **35.9890** |

**Mitigated**

| | Indoor/Outdoor Use | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | Mgal | MT/yr | | | |
| Medical Office Building | 11.937 / 2.27371 | 24.8924 | 0.3899 | 9.3700e-003 | 35.9830 |
| Parking Lot | 0 / 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **24.8924** | **0.3899** | **9.3700e-003** | **35.9830** |

# 8.0 Waste Detail

## 8.1 Mitigation Measures Waste

**Category/Year**

| | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|
| | MT/yr | | | |
| Mitigated | 208.5529 | 12.3251 | 0.0000 | 467.3805 |
| Unmitigated | 208.5529 | 12.3251 | 0.0000 | 467.3805 |

## 8.2 Waste by Land Use

**Unmitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|
| Land Use | tons | MT/yr | | | |
| Medical Office Building | 1027.4 | 208.5529 | 12.3251 | 0.0000 | 467.3805 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **208.5529** | **12.3251** | **0.0000** | **467.3805** |

**Mitigated**

| | Waste Disposed | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|

| Land Use | tons | MT/yr | | | |
|---|---|---|---|---|---|
| Medical Office Building | 1027.4 | 208.5529 | 12.3251 | 0.0000 | 467.3805 |
| Parking Lot | 0 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | | **208.5529** | **12.3251** | **0.0000** | **467.3805** |

## 9.0 Operational Offroad

| Equipment Type | Number | Hours/Day | Days/Year | Horse Power | Load Factor | Fuel Type |
|---|---|---|---|---|---|---|

## 10.0 Vegetation

# *VA SAN JOSÉ OUTPATIENT CLINIC PROJECT*
# *CONSTRUCTION TAC ASSESSMENT*
# *SAN JOSÉ, CALIFORNIA*

**November 26, 2014**

♦ ♦ ♦

**Prepared for:**

**Sally Rideout**
**Principal Planner**
**EMC Planning Group, Inc.**
**301 Lighthouse Avenue, Suite C**
**Monterey, California 93940**

**Prepared by:**

**Joshua D. Carman and**
**William Popenuck**

ILLINGWORTH & RODKIN, INC.
Acoustics • Air Quality
1 Willowbrook Court, Suite 120
Petaluma, CA 94954
(707) 794-0400

**Project: 14-158**

## Introduction

The purpose of this report is to address toxic air contaminant (TAC) impacts associated with construction of the proposed U.S. Department of Veterans Affairs (VA) San José Outpatient Clinic Project in San José, California. The project would construct up to a 95,127 square foot (s.f.) clinic on one of two possible sites near the U.S. Highway 101 (U.S. 101) and State Route 85 interchange. The proposed San Ignacio site is located at the southeast corner of Via Del Oro and San Ignacio Avenue and the proposed Silver Creek site is located at 5855 Silver Creek Valley Place. Community risk impacts could occur due to temporary construction emissions. This analysis was conducted following guidance provided by the Bay Area Air Quality Management District (BAAQMD).

## Setting

The project is located in the northern portion of the Santa Clara County, which is in the San Francisco Bay Area Air Basin. TACs are a broad class of compounds known to cause morbidity or mortality (usually because they cause cancer). TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., diesel particulate matter near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and Federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about three-quarters of the cancer risk from TACs (based on the Bay Area average). According to the California Air Resources Board (CARB), diesel exhaust is a complex mixture of gases, vapors, and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the CARB, and are listed as carcinogens either under the state's Proposition 65 or under the Federal Hazardous Air Pollutants programs.

The BAAQMD is the regional agency tasked with managing air quality in the region. At the State level, the CARB (a part of the California Environmental Protection Agency [EPA]) oversees regional air district activities and regulates air quality at the State level. The BAAQMD has recently published California Environmental Quality Act (CEQA) Air Quality Guidelines that are used in this assessment to evaluate air quality impacts of projects.[1]

### Sensitive Receptors

There are groups of people more affected by air pollution than others. CARB has identified the following persons who are most likely to be affected by air pollution: children under 14, the elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases. These groups are classified as sensitive receptors. Locations that may contain a high concentration of these sensitive population groups include residential areas, hospitals, daycare facilities, elder care facilities, elementary schools, and parks. The closest off-site sensitive receptors are single-

[1] Bay Area Air Quality Management District. 2011. BAAQMD CEQA Air Quality Guidelines. May.

family residences across Santa Teresa Boulevard, south of the San Ignacio site and single-family residences adjacent to the northeastern project site boundary of the Silver Creek site.

**Significance Thresholds**

The BAAQMD identified significance thresholds for exposure to TACs and fine particulate matter ($PM_{2.5}$) as part of its May 2011 CEQA Air Quality Guidelines[2] that were called into question by an order issued March 5, 2012, in *California Building Industry Association v. BAAQMD* (Alameda Superior Court Case No. RGI0548693). The order requires BAAQMD to set aside its approval of the thresholds until it has conducted environmental review under CEQA. In August 2013, the Appellate Court struck down the lower court's order to set aside the thresholds. However, this litigation remains pending as the California Supreme Court recently accepted a portion of CBIA's petition to review the appellate court's decision to uphold BAAQMD's adoption of the thresholds. The specific portion of the argument to be considered is in regard to whether CEQA requires consideration of the effects of the environment on a project (as contrasted to the effects of a proposed project on the environment). Those issues are not relevant to the scientific basis of BAAQMD's analysis of what levels of pollutants should be deemed significant. Therefore, the significance thresholds contained in the 2011 CEQA Air Quality Guidelines are applied to this project.

The BAAQMD proposed "Thresholds of Significance" for local community risk and hazard impacts that apply to both the siting of a new source and to the siting of a new receptor. Local community risk and hazard impacts are associated with TACs and $PM_{2.5}$ since emissions of these pollutants may cause significant health impacts at the local level. BAAQMD guidelines recommend:

The proposed project would result in a significant impact if emissions of TACs or $PM_{2.5}$ exceed any of the following Thresholds of Significance:

*Single Source Impacts*

- Non-compliance with a qualified risk reduction plan;
- An excess cancer risk level of more than 10 in one million, or a non-cancer (i.e., chronic or acute) hazard index greater than 1.0 would be significant; or
- An incremental increase greater than 0.3 micrograms per cubic meter ($\mu g/m^3$) annual average $PM_{2.5}$ would be significant.

*Cumulative Source Impacts*

A project would have a cumulatively considerable impact if the aggregate total of all past, present, and foreseeable future sources within a 1,000 foot radius of the fence line of a source or from the location of a receptor, plus the contribution from the project, exceeds the following thresholds:

[2] BAAQMD, 2011. *BAAQMD CEQA Air Quality Guidelines*. May.

- An excess cancer risk levels of more than 100 in one million or a chronic non-cancer hazard index (from all local sources) greater than 10.0; or
- 0.8 micrograms per cubic meter ($\mu g/m^3$) annual average $PM_{2.5}$.

**Construction Community Risk Impacts**

Construction activities, particularly during site preparation and grading would temporarily generate fugitive dust in the form of respirable particulate matter ($PM_{10}$) and $PM_{2.5}$. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. The BAAQMD CEQA Air Quality Guidelines consider these impacts to be less than significant if best management practices are employed to reduce these emissions. *Mitigation Measure 1 would implement BAAQMD-required best management practices*.

Construction equipment and associated heavy-duty truck traffic generate diesel exhaust, which is a known TAC. Diesel exhaust poses both potential health and nuisance impacts to nearby receptors. A community risk assessment of the project construction activities at each construction site (San Ignacio and Silver Creek) was conducted that evaluated potential health effects to sensitive receptors at nearby residences from construction emissions of diesel particulate matter (DPM) and $PM_{2.5}$.[3] A dispersion model was used to predict the off-site DPM concentrations resulting from project construction so that lifetime cancer risks could be predicted.

San Ignacio Site Construction Health Risks

The California Emissions Estimator Model (CalEEMod) Version 2013.2.2 was used to predict annual emissions for construction. CalEEMod provides emission estimates for both on-site and off-site construction activities. On-site activities are primarily made up of construction equipment emissions, while off-site activity includes worker, hauling, and vendor traffic. The proposed project land uses were input into CalEEMod, which included 95,127 s.f. entered as "Hospital" on a 7.72-acre site. A construction build-out scenario, including equipment list and phasing schedule was developed based on model defaults for a project of this type and size. Construction is expected to start in June of 2015 and continue for approximately 17 months, based on the model default for a project of this type and size. It was assumed that the hauling of about 10,000 cubic yards of soil export would be necessary, which was entered into the model. *Attachment 1* includes the CalEEMod input and output values for construction emissions and the project construction schedule.

The closest off-site sensitive receptors to this site are single family residences across Santa Teresa Boulevard, south of the project site. There are additional residences in the area, but at much farther distances to the northeast and west of the project construction site. Figure 1 shows the project construction site and sensitive receptor locations (residences) used in the air quality dispersion modeling analysis where potential health impacts were evaluated.

[3] DPM is identified by California as a toxic air contaminant due to the potential to cause cancer.

*Construction Emissions*

The refined community risk assessment focused on modeling on-site construction activity. Construction period emissions were modeled using CalEEMod, as described above. Construction of the project is expected to occur over an approximate 17-month period beginning in June 2015. The CalEEMod model provided total annual $PM_{2.5}$ exhaust emissions (assumed to be DPM) for the off-road construction equipment and for exhaust emissions from on-road vehicles (haul trucks, vendor trucks, and worker vehicles), with total emissions of 0.336 tons (677 pounds). The on-road emissions are a result of haul truck travel during grading, worker travel, and vendor deliveries during construction activities. A trip length of 0.3 miles was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive $PM_{2.5}$ dust emissions were calculated by CalEEMod as 0.084 tons (168 pounds) for the overall construction period. The project emission calculations are provided in *Attachment 1*.

*Dispersion Modeling*

The U.S. EPA AERMOD dispersion model was used to predict concentrations of DPM and $PM_{2.5}$ concentrations at existing sensitive receptors in the vicinity of the project construction area. The AERMOD dispersion model is a BAAQMD-recommended model for use in modeling analysis of these types of emission activities for CEQA projects.[4] Emission sources for the construction site were grouped into two categories, exhaust emissions of DPM and fugitive $PM_{2.5}$ dust emissions. The dispersion modeling utilized two area sources to represent the on-site construction emissions, one for DPM exhaust emissions and the other for fugitive $PM_{2.5}$ dust emissions. For the exhaust emissions from construction equipment, an emission release height of six meters was used for the area source. The elevated source height reflects the height of the equipment exhaust pipes plus an additional distance for the height of the exhaust plume above the exhaust pipes to account for plume rise of the exhaust gases. For modeling fugitive $PM_{2.5}$ emissions, a near-ground level release height of two meters was used for the area source. Emissions from vehicle travel around the project site were included in the modeled area sources. Construction emissions were modeled as occurring daily from 7 a.m. to 4 p.m.

The modeling used a five-year data set (2006 - 2010) of hourly meteorological data from the San Jose Airport prepared by the BAAQMD for use with the AERMOD model. Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2015 – 2016 period were calculated using the model. DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptors (residences) at a receptor height of 1.5 meters (4.9 feet) to represent the breathing height of residents of single family homes in the area. Figure 1 shows the construction area modeled and locations of nearby sensitive receptors.

*Predicted Cancer Risk and Hazards*

The maximum modeled DPM and $PM_{2.5}$ concentrations occurred near the southeast of the project site at a residence south of U.S. 101. The location of this receptor is identified on Figure

[4] Bay Area Air Quality Management District (BAAQMD), 2012, *Recommended Methods for Screening and Modeling Local Risks and Hazards, Version 3.0.* May.

1. Increased cancer risks were calculated using the modeled concentrations and BAAQMD-recommended risk assessment methods for both a child exposure (3rd trimester through 2 years of age) and adult exposure.[5] The cancer risk calculations were based on applying the BAAQMD-recommended age sensitivity factors to the DPM exposures. Age-sensitivity factors reflect the greater sensitivity of infants and small children to cancer causing TACs. BAAQMD-recommended exposure parameters were used for the cancer risk calculations.[6] Infant and child exposures were assumed to occur at all residences during the entire construction period.

Results of this assessment indicate that for project construction the incremental residential child cancer risk at the maximally exposed individual (MEI) receptor location would be 1.5 in one million and the incremental residential adult cancer risk would be 0.1 in one million. These increased cancer risks are below the BAAQMD significance threshold for cancer risk of 10 in one million or greater. This would be considered a *less-than-significant* impact.

The maximum modeled annual $PM_{2.5}$ concentration was 0.01 $\mu g/m^3$ occurring at the same location as the maximum cancer risk. This $PM_{2.5}$ concentration is much lower than the BAAQMD significance threshold of 0.3 $\mu g/m^3$ used to judge the significance of health impacts from $PM_{2.5}$. This would be considered a *less-than-significant* impact.

Potential non-cancer health effects due to chronic exposure to DPM were also evaluated. Non-cancer health hazards from TAC exposure are expressed in terms of a hazard index (HI), which is the ratio of the TAC concentration to a reference exposure level (REL). California's Office of Environmental Health and Hazard Assessment (OEHHA) has defined acceptable concentration levels for contaminants that pose non-cancer health hazards. TAC concentrations below the REL are not expected to cause adverse health impacts, even for sensitive individuals. The chronic inhalation REL for DPM is 5 $\mu g/m^3$. The maximum modeled annual residential DPM concentration was 0.01 $\mu g/m^3$, which is much lower than the REL. The maximum computed hazard index based on this DPM concentration is 0.002 which is much lower than the BAAQMD significance criterion of a hazard index greater than 1.0. *Attachment 2* includes the emission calculations used for the area source modeling and the cancer risk calculations.

Construction at the San Ignacio site would have a *less-than-significant* impact with respect to community risk caused by construction activities.

Silver Creek Site Construction Health Risks

CalEEMod was used to predict annual emissions for construction. The proposed project land uses were input into CalEEMod, which included 95,127 s.f. entered as "Hospital" on a 5.86-acre site. A construction build-out scenario, including equipment list and phasing schedule was developed based on model defaults for a project of this type and size. Construction is expected to start in June of 2015 and continue for approximately 17 months, based on the model default for a project of this type and size. It was assumed that the hauling of about 10,000 cubic yards of soil export would be necessary, which was entered into the model. *Attachment 1* includes the

[5] *Ibid*.
[6] Bay Area Air Quality Management District (BAAQMD), 2010, *Air Toxics NSR Program Health Risk Screening Analysis Guidelines*, January.

CalEEMod input and output values for construction emissions and the project construction schedule.

The closest off-site sensitive receptors to this site are single-family residences adjacent to the northeastern project site boundary of the Silver Creek site. There are additional residences farther away from the project construction site on the south side of U.S. 101. Figure 2 shows the project construction site and sensitive receptor locations (residences) used in the air quality dispersion modeling analysis where potential health impacts were evaluated.

*Construction Emissions*

Construction period emissions were modeled with CalEEMod, as described above. Total annual $PM_{2.5}$ exhaust emissions for the off-road construction equipment and for exhaust emissions from on-road vehicles (haul trucks, vendor trucks, and worker vehicles) were calculated as 0.3615 tons (723 pounds). A trip length of 0.3 miles was used to represent vehicle travel while at or near the construction site. It was assumed that these emissions from on-road vehicles traveling at or near the site would occur at the construction site. Fugitive $PM_{2.5}$ dust emissions were calculated by CalEEMod as 0.084 tons (168.1 pounds) for the overall construction period. The project emission calculations are provided in *Attachment 1*.

*Dispersion Modeling*

Dispersion modeling of project construction emissions was conducted using the AERMOD dispersion model to predict concentrations of DPM and $PM_{2.5}$ at existing sensitive receptors in the vicinity of the project construction site. The assumptions and procedures used for this modeling were the same as discussed above for the San Ignacio site construction impact evaluation. Construction emissions were modeled as occurring daily from 7 a.m. to 4 p.m.

Annual DPM and $PM_{2.5}$ concentrations from construction activities during the 2015 to 2016 period were calculated using the AERMOD model. DPM and $PM_{2.5}$ concentrations were calculated at nearby sensitive receptors with receptor heights of 1.5 meters. Figure 2 shows the construction area modeled and locations of nearby sensitive receptors.

*Predicted Cancer Risk and Hazards*

The maximum modeled DPM and $PM_{2.5}$ concentrations occurred near the northeastern portion of the project site at a residence adjacent to the site. The location of this receptor is identified on Figure 2. Increased cancer risks were calculated using the modeled concentrations and BAAQMD-recommended risk assessment methods previously described.

Results of this assessment indicate that for project construction the incremental residential child cancer risk at the MEI receptor location would be 34.9 in one million and the incremental residential adult cancer risk would be 1.8 in one million. While the increased cancer risks for a residential adult would be below the BAAQMD significance threshold for cancer risk of 10 in one million or greater, the increased cancer risk for a residential child would be above the cancer risk threshold and would be considered a *significant impact*.

The maximum modeled annual $PM_{2.5}$ concentration was 0.30 $\mu g/m^3$ occurring at the same location as the maximum cancer risk. This $PM_{2.5}$ concentration is at the BAAQMD significance threshold of 0.3 $\mu g/m^3$ used to judge the significance of health impacts from $PM_{2.5}$. This would be considered a *less-than-significant* impact because the threshold is not exceeded.

Potential non-cancer health effects due to chronic exposure to DPM were also evaluated. The maximum modeled annual DPM concentration was 0.225 $\mu g/m^3$, which is much lower than the REL5 of 5 $\mu g/m^3$. The maximum computed hazard index based on this DPM concentration is 0.045 which is lower than the BAAQMD significance criterion of a hazard index greater than 1.0. *Attachment 2* includes the emission calculations used for the area source modeling and the cancer risk calculations.

Construction at the Silver Creek site would have a *significant impact* with respect to community risk caused by construction activities. Implementation of *Mitigation Measures 1 and 2* would reduce this impact to a level of less than significant.

Mitigation Measure 1: The contractor shall implement the following Best Management Practices that are required of all construction projects:

1. All exposed surfaces (e.g., parking areas, staging areas, soil piles, graded areas, and unpaved access roads) shall be watered two times per day;

2. All haul trucks transporting soil, sand, or other loose material off-site shall be covered;

3. All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited;

4. All vehicle speeds on unpaved roads shall be limited to 15 mph;

5. All roadways, driveways, and sidewalks to be paved shall be completed as soon as possible. Building pads shall be laid as soon as possible after grading unless seeding or soil binders are used;

6. Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to 5 minutes (as required by the California airborne toxics control measure Title 13, Section 2485 of California Code of Regulations [CCR]). Clear signage shall be provided for construction workers at all access points;

7. All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation; and

8. Post a publicly visible sign with the telephone number and person to contact at the Lead Agency regarding dust complaints. This person shall respond and take corrective action within 48 hours. The Air District's phone number shall also be visible to ensure compliance with applicable regulations.

Mitigation Measure 2: Selection of equipment during construction to minimize emissions. Such equipment selection would include the following:

1. All mobile diesel-powered off-road equipment larger than 50 horsepower and operating on the site for more than two days continuously shall meet U.S. EPA particulate matter emissions standards for Tier 2 engines or equivalent;

2. All diesel-powered portable equipment (i.e., air compressors, concrete saws, forklifts, and generator sets) larger than 50 horsepower and tractors/loaders/backhoes operating on the site for more than two days continuously shall meet U.S. EPA particulate matter emissions standards for Tier 4 engines or equivalent; and

3. Minimize the number of hours that equipment will operate, including the use of idling restrictions.

Note that the construction contractor could use other measures to minimize construction period DPM emissions to reduce the predicted cancer risk below the thresholds. Such measures may be the use of alternative powered equipment (e.g., LPG-powered lifts), alternative fuels (e.g., biofuels), added exhaust devices, or a combination of measures, provided that these measures are approved by the City and demonstrated to reduce community risk impacts to less than significant.

Implementation of *Mitigation Measure 1* is considered to reduce exhaust emissions by 5 percent and fugitive dust emissions by over 50 percent. Implementation of *Mitigation Measure 2* would further reduce on-site diesel exhaust emissions by over 82 percent. With mitigation, the computed maximum increased child cancer risk for construction at Silver Creek would be 6.0 in one million. This cancer risk would be below the BAAQMD thresholds of 10 per one million for cancer risk. Therefore, *after implementation of these recommended measures, the project would have a less-than-significant impact with respect to community risk caused by construction activities.*

**Figure 1**
**San Ignacio Construction Site and Locations of Sensitive Receptors and Maximum Cancer Risk**

**Figure 2**
**Silver Creek Project Construction Site and Locations of Sensitive Receptors and Maximum Cancer Risk**

**Attachment 1: CalEEMod Output Worksheets and Construction Schedule**

# San Jose VA - San Ignacio Site

**Santa Clara County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 95.13 | 1000sqft | 7.72 | 95,127.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 58 |
| **Climate Zone** | 4 | | | **Operational Year** | 2014 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Land Use - S.f. and acreage from plan drawings.

Construction Phase - Start date 6/15/2015. Building Construction 8/15/2015 - 10/15/2016.

Grading - Assume 10,000 CY soil export.

Trips and VMT - 0.3 mile trip lengths to calculate risk from on-site vehicle travel.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 10.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstructionPhase | NumDays | 230.00 | 305.00 |
| tblConstructionPhase | PhaseEndDate | 9/23/2016 | 10/15/2016 |
| tblConstructionPhase | PhaseStartDate | 7/25/2015 | 8/15/2015 |
| tblGrading | MaterialExported | 0.00 | 10,000.00 |
| tblLandUse | LotAcreage | 2.18 | 7.72 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |

| | | | |
|---|---|---|---|
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |

## 2.0 Emissions Summary

### 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2015 | 0.2651 | 2.2145 | 1.6271 | 1.8700e-003 | 0.1572 | 0.1438 | 0.3010 | 0.0836 | 0.1344 | 0.2180 | 0.0000 | 172.0866 | 172.0866 | 0.0445 | 0.0000 | 173.0210 |
| 2016 | 0.8938 | 3.2253 | 2.2898 | 3.0800e-003 | 1.2400e-003 | 0.2175 | 0.2187 | 3.5000e-004 | 0.2042 | 0.2045 | 0.0000 | 278.2396 | 278.2396 | 0.0687 | 0.0000 | 279.6824 |
| **Total** | **1.1589** | **5.4399** | **3.9170** | **4.9500e-003** | **0.1585** | **0.3612** | **0.5197** | **0.0840** | **0.3386** | **0.4226** | **0.0000** | **450.3262** | **450.3262** | **0.1132** | **0.0000** | **452.7035** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Site Preparation | Site Preparation | 6/15/2015 | 6/26/2015 | 5 | 10 | |
| 2 | Grading | Grading | 6/27/2015 | 7/24/2015 | 5 | 20 | |
| 3 | Building Construction | Building Construction | 8/15/2015 | 10/15/2016 | 5 | 305 | |
| 4 | Paving | Paving | 10/16/2016 | 11/11/2016 | 5 | 20 | |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 5 | Architectural Coating | Architectural Coating | 11/12/2016 | 12/9/2016 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 142,691; Non-Residential Outdoor: 47,564 (Architectural Coating –**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |
| Grading | Excavators | 1 | 8.00 | 162 | 0.38 |
| Building Construction | Cranes | 1 | 7.00 | 226 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Paving | Pavers | 2 | 8.00 | 125 | 0.42 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 255 | 0.40 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Grading | Graders | 1 | 8.00 | 174 | 0.41 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Paving | Paving Equipment | 2 | 8.00 | 130 | 0.36 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 255 | 0.40 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |

## Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Grading | 6 | 15.00 | 0.00 | 1,250.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Building Construction | 9 | 30.00 | 16.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |

## 3.2 Site Preparation - 2015

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0903 | 0.0000 | 0.0903 | 0.0497 | 0.0000 | 0.0497 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0263 | 0.2845 | 0.2132 | 2.0000e-004 | | 0.0154 | 0.0154 | | 0.0142 | 0.0142 | 0.0000 | 18.6506 | 18.6506 | 5.5700e-003 | 0.0000 | 18.7675 |
| **Total** | **0.0263** | **0.2845** | **0.2132** | **2.0000e-004** | **0.0903** | **0.0154** | **0.1058** | **0.0497** | **0.0142** | **0.0639** | **0.0000** | **18.6506** | **18.6506** | **5.5700e-003** | **0.0000** | **18.7675** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.6000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0368 | 0.0368 | 0.0000 | 0.0000 | 0.0369 |
| **Total** | **2.6000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0368** | **0.0368** | **0.0000** | **0.0000** | **0.0369** |

## 3.3 Grading - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0661 | 0.0000 | 0.0661 | 0.0338 | 0.0000 | 0.0338 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0383 | 0.4042 | 0.2667 | 3.0000e-004 | | 0.0233 | 0.0233 | | 0.0214 | 0.0214 | 0.0000 | 28.3860 | 28.3860 | 8.4700e-003 | 0.0000 | 28.5639 |
| **Total** | **0.0383** | **0.4042** | **0.2667** | **3.0000e-004** | **0.0661** | **0.0233** | **0.0894** | **0.0338** | **0.0214** | **0.0552** | **0.0000** | **28.3860** | **28.3860** | **8.4700e-003** | **0.0000** | **28.5639** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.2000e-003 | 0.0176 | 0.1079 | 2.0000e-005 | 1.7000e-004 | 1.1000e-004 | 2.8000e-004 | 5.0000e-005 | 1.0000e-004 | 1.5000e-004 | 0.0000 | 1.6485 | 1.6485 | 4.0000e-005 | 0.0000 | 1.6493 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **7.6300e-003** | **0.0177** | **0.1094** | **2.0000e-005** | **2.0000e-004** | **1.1000e-004** | **3.2000e-004** | **6.0000e-005** | **1.0000e-004** | **1.6000e-004** | **0.0000** | **1.7098** | **1.7098** | **5.0000e-005** | **0.0000** | **1.7108** |

## 3.4 Building Construction - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.1811 | 1.4865 | 0.9279 | 1.3300e-003 | | 0.1048 | 0.1048 | | 0.0985 | 0.0985 | 0.0000 | 120.7772 | 120.7772 | 0.0303 | 0.0000 | 121.4136 |
| **Total** | **0.1811** | **1.4865** | **0.9279** | **1.3300e-003** | | **0.1048** | **0.1048** | | **0.0985** | **0.0985** | **0.0000** | **120.7772** | **120.7772** | **0.0303** | **0.0000** | **121.4136** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.2100e-003 | 0.0206 | 0.0942 | 2.0000e-005 | 2.3000e-004 | 1.3000e-004 | 3.6000e-004 | 7.0000e-005 | 1.2000e-004 | 1.9000e-004 | 0.0000 | 1.9195 | 1.9195 | 3.0000e-005 | 0.0000 | 1.9202 |
| Worker | 4.2300e-003 | 1.0900e-003 | 0.0149 | 1.0000e-005 | 3.4000e-004 | 1.0000e-005 | 3.6000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.6068 | 0.6068 | 7.0000e-005 | 0.0000 | 0.6083 |
| **Total** | **0.0114** | **0.0217** | **0.1091** | **3.0000e-005** | **5.7000e-004** | **1.4000e-004** | **7.2000e-004** | **1.6000e-004** | **1.3000e-004** | **3.0000e-004** | **0.0000** | **2.5263** | **2.5263** | **1.0000e-004** | **0.0000** | **2.5285** |

## 3.4 Building Construction - 2016

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.3508 | 2.9362 | 1.9062 | 2.7600e-003 | | 0.2026 | 0.2026 | | 0.1904 | 0.1904 | 0.0000 | 249.4182 | 249.4182 | 0.0619 | 0.0000 | 250.7173 |
| **Total** | **0.3508** | **2.9362** | **1.9062** | **2.7600e-003** | | **0.2026** | **0.2026** | | **0.1904** | **0.1904** | **0.0000** | **249.4182** | **249.4182** | **0.0619** | **0.0000** | **250.7173** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.0394 | 0.1870 | 5.0000e-005 | 4.8000e-004 | 2.1000e-004 | 6.9000e-004 | 1.4000e-004 | 2.0000e-004 | 3.4000e-004 | 0.0000 | 3.9513 | 3.9513 | 6.0000e-005 | 0.0000 | 3.9526 |
| Worker | 8.1300e-003 | 2.0100e-003 | 0.0278 | 2.0000e-005 | 7.1000e-004 | 3.0000e-005 | 7.4000e-004 | 1.9000e-004 | 3.0000e-005 | 2.2000e-004 | 0.0000 | 1.2202 | 1.2202 | 1.3000e-004 | 0.0000 | 1.2230 |
| **Total** | **0.0218** | **0.0414** | **0.2147** | **7.0000e-005** | **1.1900e-003** | **2.4000e-004** | **1.4300e-003** | **3.3000e-004** | **2.3000e-004** | **5.6000e-004** | **0.0000** | **5.1714** | **5.1714** | **1.9000e-004** | **0.0000** | **5.1755** |

## 3.5 Paving - 2016

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0209 | 0.2239 | 0.1482 | 2.2000e-004 | | 0.0126 | 0.0126 | | 0.0116 | 0.0116 | 0.0000 | 21.0138 | 21.0138 | 6.3400e-003 | 0.0000 | 21.1469 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0209** | **0.2239** | **0.1482** | **2.2000e-004** | | **0.0126** | **0.0126** | | **0.0116** | **0.0116** | **0.0000** | **21.0138** | **21.0138** | **6.3400e-003** | **0.0000** | **21.1469** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.9000e-004 | 1.0000e-004 | 1.3500e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0592 | 0.0592 | 1.0000e-005 | 0.0000 | 0.0594 |
| **Total** | **3.9000e-004** | **1.0000e-004** | **1.3500e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0592** | **0.0592** | **1.0000e-005** | **0.0000** | **0.0594** |

## 3.6 Architectural Coating - 2016

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4960 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.6800e-003 | 0.0237 | 0.0188 | 3.0000e-005 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | 0.0000 | 2.5533 | 2.5533 | 3.0000e-004 | 0.0000 | 2.5596 |
| **Total** | **0.4997** | **0.0237** | **0.0188** | **3.0000e-005** | | **1.9700e-003** | **1.9700e-003** | | **1.9700e-003** | **1.9700e-003** | **0.0000** | **2.5533** | **2.5533** | **3.0000e-004** | **0.0000** | **2.5596** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |
| **Total** | **1.6000e-004** | **4.0000e-005** | **5.4000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0237** | **0.0237** | **0.0000** | **0.0000** | **0.0238** |

# San Jose VA - Silver Creek Site

**Santa Clara County, Annual**

## 1.0 Project Characteristics

### 1.1 Land Usage

| Land Uses | Size | Metric | Lot Acreage | Floor Surface Area | Population |
|---|---|---|---|---|---|
| Hospital | 95.13 | 1000sqft | 5.86 | 95,127.00 | 0 |

### 1.2 Other Project Characteristics

| | | | | | |
|---|---|---|---|---|---|
| **Urbanization** | Urban | **Wind Speed (m/s)** | 2.2 | **Precipitation Freq (Days)** | 58 |
| **Climate Zone** | 4 | | | **Operational Year** | 2014 |
| **Utility Company** | Pacific Gas & Electric Company | | | | |
| **CO2 Intensity (lb/MWhr)** | 641.35 | **CH4 Intensity (lb/MWhr)** | 0.029 | **N2O Intensity (lb/MWhr)** | 0.006 |

### 1.3 User Entered Comments & Non-Default Data

Land Use - S.f. (assume same as San Ignacio or less) and acreage from plan drawings.

Construction Phase - Start date 6/15/2015. Building Construction 8/15/2015 - 10/15/2016.

Trips and VMT - 0.3 mile trip lengths to calculate risk from on-site vehicle travel.

Demolition - 100 s.f. shed.

Grading - Assume 10,000 CY soil export.

Construction Off-road Equipment Mitigation - Tier 2 engines for equipment >50 hp. Tier 4 air compressors, concrete saws, forklifts, generator sets, tractors/loaders/backhoes. BAAQMD BMPs.

| Table Name | Column Name | Default Value | New Value |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |

| | | | |
|---|---|---|---|
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 4.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 3.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 1.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 2.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 6.00 |
| tblConstEquipMitigation | NumberOfEquipmentMitigated | 0.00 | 10.00 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 2 |
| tblConstEquipMitigation | Tier | No Change | Tier 4 Final |
| tblConstructionPhase | NumDays | 230.00 | 305.00 |
| tblConstructionPhase | PhaseEndDate | 9/23/2016 | 10/15/2016 |
| tblConstructionPhase | PhaseEndDate | 7/24/2015 | 6/26/2015 |
| tblConstructionPhase | PhaseStartDate | 7/25/2015 | 8/15/2015 |
| tblConstructionPhase | PhaseStartDate | 7/11/2015 | 6/15/2015 |
| tblGrading | MaterialExported | 0.00 | 10,000.00 |
| tblLandUse | LandUseSquareFeet | 95,130.00 | 95,127.00 |
| tblLandUse | LotAcreage | 2.18 | 5.86 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |

| | | | |
|---|---|---|---|
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | HaulingTripLength | 20.00 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | VendorTripLength | 7.30 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |
| tblTripsAndVMT | WorkerTripLength | 12.40 | 0.30 |

## 2.0 Emissions Summary

### 2.1 Overall Construction

**Unmitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2015 | 0.3106 | 2.6983 | 1.9894 | 2.2700e-003 | 0.1573 | 0.1683 | 0.3256 | 0.0837 | 0.1573 | 0.2409 | 0.0000 | 209.5891 | 209.5891 | 0.0547 | 0.0000 | 210.7369 |
| 2016 | 0.8938 | 3.2253 | 2.2898 | 3.0800e-003 | 1.2400e-003 | 0.2175 | 0.2187 | 3.5000e-004 | 0.2042 | 0.2045 | 0.0000 | 278.2396 | 278.2396 | 0.0687 | 0.0000 | 279.6824 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **1.2044** | **5.9236** | **4.2792** | **5.3500e-003** | **0.1585** | **0.3857** | **0.5443** | **0.0840** | **0.3614** | **0.4454** | **0.0000** | **487.8288** | **487.8288** | **0.1234** | **0.0000** | **490.4193** |

**Mitigated Construction**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | tons/yr | | | | | | | | | | MT/yr | | | | | |
| 2015 | 0.0906 | 0.9678 | 1.7026 | 2.2700e-003 | 0.0712 | 0.0285 | 0.0998 | 0.0190 | 0.0285 | 0.0475 | 0.0000 | 209.5889 | 209.5889 | 0.0547 | 0.0000 | 210.7367 |
| 2016 | 0.6211 | 0.9569 | 2.2879 | 3.0800e-003 | 1.2400e-003 | 0.0337 | 0.0349 | 3.5000e-004 | 0.0337 | 0.0340 | 0.0000 | 278.2393 | 278.2393 | 0.0687 | 0.0000 | 279.6821 |
| **Total** | **0.7117** | **1.9247** | **3.9905** | **5.3500e-003** | **0.0725** | **0.0622** | **0.1347** | **0.0194** | **0.0622** | **0.0815** | **0.0000** | **487.8282** | **487.8282** | **0.1234** | **0.0000** | **490.4187** |

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio-CO2 | Total CO2 | CH4 | N20 | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Percent Reduction** | **40.91** | **67.51** | **6.75** | **0.00** | **54.28** | **83.87** | **75.25** | **76.96** | **82.80** | **81.70** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** | **0.00** |

## 3.0 Construction Detail

**Construction Phase**

| Phase Number | Phase Name | Phase Type | Start Date | End Date | Num Days Week | Num Days | Phase Description |
|---|---|---|---|---|---|---|---|
| 1 | Demolition | Demolition | 6/15/2015 | 7/10/2015 | 5 | 20 | |
| 2 | Site Preparation | Site Preparation | 6/15/2015 | 6/26/2015 | 5 | 10 | |
| 3 | Grading | Grading | 6/27/2015 | 7/24/2015 | 5 | 20 | |
| 4 | Building Construction | Building Construction | 8/15/2015 | 10/15/2016 | 5 | 305 | |
| 5 | Paving | Paving | 10/16/2016 | 11/11/2016 | 5 | 20 | |
| 6 | Architectural Coating | Architectural Coating | 11/12/2016 | 12/9/2016 | 5 | 20 | |

**Acres of Grading (Site Preparation Phase): 0**

**Acres of Grading (Grading Phase): 10**

**Acres of Paving: 0**

**Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 142,691; Non-Residential Outdoor: 47,564 (Architectural Coating –**

## OffRoad Equipment

| Phase Name | Offroad Equipment Type | Amount | Usage Hours | Horse Power | Load Factor |
|---|---|---|---|---|---|
| Demolition | Concrete/Industrial Saws | 1 | 8.00 | 81 | 0.73 |
| Demolition | Excavators | 3 | 8.00 | 162 | 0.38 |
| Demolition | Rubber Tired Dozers | 2 | 8.00 | 255 | 0.40 |
| Site Preparation | Rubber Tired Dozers | 3 | 8.00 | 255 | 0.40 |
| Site Preparation | Tractors/Loaders/Backhoes | 4 | 8.00 | 97 | 0.37 |
| Grading | Excavators | 1 | 8.00 | 162 | 0.38 |
| Grading | Graders | 1 | 8.00 | 174 | 0.41 |
| Grading | Rubber Tired Dozers | 1 | 8.00 | 255 | 0.40 |
| Grading | Tractors/Loaders/Backhoes | 3 | 8.00 | 97 | 0.37 |
| Building Construction | Cranes | 1 | 7.00 | 226 | 0.29 |
| Building Construction | Forklifts | 3 | 8.00 | 89 | 0.20 |
| Building Construction | Generator Sets | 1 | 8.00 | 84 | 0.74 |
| Building Construction | Tractors/Loaders/Backhoes | 3 | 7.00 | 97 | 0.37 |
| Building Construction | Welders | 1 | 8.00 | 46 | 0.45 |
| Paving | Pavers | 2 | 8.00 | 125 | 0.42 |
| Paving | Paving Equipment | 2 | 8.00 | 130 | 0.36 |
| Paving | Rollers | 2 | 8.00 | 80 | 0.38 |
| Architectural Coating | Air Compressors | 1 | 6.00 | 78 | 0.48 |

## Trips and VMT

| Phase Name | Offroad Equipment Count | Worker Trip Number | Vendor Trip Number | Hauling Trip Number | Worker Trip Length | Vendor Trip Length | Hauling Trip Length | Worker Vehicle Class | Vendor Vehicle Class | Hauling Vehicle Class |
|---|---|---|---|---|---|---|---|---|---|---|
| Demolition | 6 | 15.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Site Preparation | 7 | 18.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| Grading | 6 | 15.00 | 0.00 | 1,250.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Building Construction | 9 | 30.00 | 16.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Paving | 6 | 15.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |
| Architectural Coating | 1 | 6.00 | 0.00 | 0.00 | 0.30 | 0.30 | 0.30 | LD_Mix | HDT_Mix | HHDT |

## 3.1 Mitigation Measures Construction

Use Cleaner Engines for Construction Equipment

Use Soil Stabilizer

Replace Ground Cover

Water Exposed Area

Clean Paved Roads

## 3.2 Demolition - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 5.0000e-005 | 0.0000 | 5.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0451 | 0.4836 | 0.3607 | 4.0000e-004 | | 0.0245 | 0.0245 | | 0.0229 | 0.0229 | 0.0000 | 37.4413 | 37.4413 | 0.0102 | 0.0000 | 37.6544 |
| **Total** | **0.0451** | **0.4836** | **0.3607** | **4.0000e-004** | **5.0000e-005** | **0.0245** | **0.0246** | **1.0000e-005** | **0.0229** | **0.0229** | **0.0000** | **37.4413** | **37.4413** | **0.0102** | **0.0000** | **37.6544** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **4.3000e-004** | **1.1000e-004** | **1.5000e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0613** | **0.0613** | **1.0000e-005** | **0.0000** | **0.0614** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 2.0000e-005 | 0.0000 | 2.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0111 | 0.2879 | 0.2527 | 4.0000e-004 | | 7.4200e-003 | 7.4200e-003 | | 7.4200e-003 | 7.4200e-003 | 0.0000 | 37.4412 | 37.4412 | 0.0102 | 0.0000 | 37.6544 |
| **Total** | **0.0111** | **0.2879** | **0.2527** | **4.0000e-004** | **2.0000e-005** | **7.4200e-003** | **7.4400e-003** | **0.0000** | **7.4200e-003** | **7.4200e-003** | **0.0000** | **37.4412** | **37.4412** | **0.0102** | **0.0000** | **37.6544** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **4.3000e-004** | **1.1000e-004** | **1.5000e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0613** | **0.0613** | **1.0000e-005** | **0.0000** | **0.0614** |

## 3.3 Site Preparation - 2015

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0903 | 0.0000 | 0.0903 | 0.0497 | 0.0000 | 0.0497 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0263 | 0.2845 | 0.2132 | 2.0000e-004 | | 0.0154 | 0.0154 | | 0.0142 | 0.0142 | 0.0000 | 18.6506 | 18.6506 | 5.5700e-003 | 0.0000 | 18.7675 |
| **Total** | **0.0263** | **0.2845** | **0.2132** | **2.0000e-004** | **0.0903** | **0.0154** | **0.1058** | **0.0497** | **0.0142** | **0.0639** | **0.0000** | **18.6506** | **18.6506** | **5.5700e-003** | **0.0000** | **18.7675** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.6000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0368 | 0.0368 | 0.0000 | 0.0000 | 0.0369 |
| **Total** | **2.6000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0368** | **0.0368** | **0.0000** | **0.0000** | **0.0369** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0407 | 0.0000 | 0.0407 | 0.0112 | 0.0000 | 0.0112 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 4.0000e-003 | 0.1153 | 0.1170 | 2.0000e-004 | | 2.4800e-003 | 2.4800e-003 | | 2.4800e-003 | 2.4800e-003 | 0.0000 | 18.6505 | 18.6505 | 5.5700e-003 | 0.0000 | 18.7675 |
| **Total** | **4.0000e-003** | **0.1153** | **0.1170** | **2.0000e-004** | **0.0407** | **2.4800e-003** | **0.0431** | **0.0112** | **2.4800e-003** | **0.0137** | **0.0000** | **18.6505** | **18.6505** | **5.5700e-003** | **0.0000** | **18.7675** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 2.6000e-004 | 7.0000e-005 | 9.0000e-004 | 0.0000 | 2.0000e-005 | 0.0000 | 2.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0368 | 0.0368 | 0.0000 | 0.0000 | 0.0369 |
| **Total** | **2.6000e-004** | **7.0000e-005** | **9.0000e-004** | **0.0000** | **2.0000e-005** | **0.0000** | **2.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0368** | **0.0368** | **0.0000** | **0.0000** | **0.0369** |

## 3.4 Grading - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Fugitive Dust | | | | | 0.0661 | 0.0000 | 0.0661 | 0.0338 | 0.0000 | 0.0338 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 0.0383 | 0.4042 | 0.2667 | 3.0000e-004 | | 0.0233 | 0.0233 | | 0.0214 | 0.0214 | 0.0000 | 28.3860 | 28.3860 | 8.4700e-003 | 0.0000 | 28.5639 |
| **Total** | **0.0383** | **0.4042** | **0.2667** | **3.0000e-004** | **0.0661** | **0.0233** | **0.0894** | **0.0338** | **0.0214** | **0.0552** | **0.0000** | **28.3860** | **28.3860** | **8.4700e-003** | **0.0000** | **28.5639** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.2000e-003 | 0.0176 | 0.1079 | 2.0000e-005 | 1.7000e-004 | 1.1000e-004 | 2.8000e-004 | 5.0000e-005 | 1.0000e-004 | 1.5000e-004 | 0.0000 | 1.6485 | 1.6485 | 4.0000e-005 | 0.0000 | 1.6493 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **7.6300e-003** | **0.0177** | **0.1094** | **2.0000e-005** | **2.0000e-004** | **1.1000e-004** | **3.2000e-004** | **6.0000e-005** | **1.0000e-004** | **1.6000e-004** | **0.0000** | **1.7098** | **1.7098** | **5.0000e-005** | **0.0000** | **1.7108** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Fugitive Dust | | | | | 0.0297 | 0.0000 | 0.0297 | 7.6000e-003 | 0.0000 | 7.6000e-003 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 7.7500e-003 | 0.1773 | 0.2038 | 3.0000e-004 | | 4.7400e-003 | 4.7400e-003 | | 4.7400e-003 | 4.7400e-003 | 0.0000 | 28.3859 | 28.3859 | 8.4700e-003 | 0.0000 | 28.5639 |
| **Total** | **7.7500e-003** | **0.1773** | **0.2038** | **3.0000e-004** | **0.0297** | **4.7400e-003** | **0.0345** | **7.6000e-003** | **4.7400e-003** | **0.0123** | **0.0000** | **28.3859** | **28.3859** | **8.4700e-003** | **0.0000** | **28.5639** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 7.2000e-003 | 0.0176 | 0.1079 | 2.0000e-005 | 1.7000e-004 | 1.1000e-004 | 2.8000e-004 | 5.0000e-005 | 1.0000e-004 | 1.5000e-004 | 0.0000 | 1.6485 | 1.6485 | 4.0000e-005 | 0.0000 | 1.6493 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 4.3000e-004 | 1.1000e-004 | 1.5000e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0613 | 0.0613 | 1.0000e-005 | 0.0000 | 0.0614 |
| **Total** | **7.6300e-003** | **0.0177** | **0.1094** | **2.0000e-005** | **2.0000e-004** | **1.1000e-004** | **3.2000e-004** | **6.0000e-005** | **1.0000e-004** | **1.6000e-004** | **0.0000** | **1.7098** | **1.7098** | **5.0000e-005** | **0.0000** | **1.7108** |

## 3.5 Building Construction - 2015

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.1811 | 1.4865 | 0.9279 | 1.3300e-003 | | 0.1048 | 0.1048 | | 0.0985 | 0.0985 | 0.0000 | 120.7772 | 120.7772 | 0.0303 | 0.0000 | 121.4136 |
| **Total** | **0.1811** | **1.4865** | **0.9279** | **1.3300e-003** | | **0.1048** | **0.1048** | | **0.0985** | **0.0985** | **0.0000** | **120.7772** | **120.7772** | **0.0303** | **0.0000** | **121.4136** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.2100e-003 | 0.0206 | 0.0942 | 2.0000e-005 | 2.3000e-004 | 1.3000e-004 | 3.6000e-004 | 7.0000e-005 | 1.2000e-004 | 1.9000e-004 | 0.0000 | 1.9195 | 1.9195 | 3.0000e-005 | 0.0000 | 1.9202 |
| Worker | 4.2300e-003 | 1.0900e-003 | 0.0149 | 1.0000e-005 | 3.4000e-004 | 1.0000e-005 | 3.6000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.6068 | 0.6068 | 7.0000e-005 | 0.0000 | 0.6083 |
| **Total** | **0.0114** | **0.0217** | **0.1091** | **3.0000e-005** | **5.7000e-004** | **1.4000e-004** | **7.2000e-004** | **1.6000e-004** | **1.3000e-004** | **3.0000e-004** | **0.0000** | **2.5263** | **2.5263** | **1.0000e-004** | **0.0000** | **2.5285** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0480 | 0.3478 | 0.9083 | 1.3300e-003 | | 0.0136 | 0.0136 | | 0.0136 | 0.0136 | 0.0000 | 120.7771 | 120.7771 | 0.0303 | 0.0000 | 121.4134 |
| **Total** | **0.0480** | **0.3478** | **0.9083** | **1.3300e-003** | | **0.0136** | **0.0136** | | **0.0136** | **0.0136** | **0.0000** | **120.7771** | **120.7771** | **0.0303** | **0.0000** | **121.4134** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 7.2100e-003 | 0.0206 | 0.0942 | 2.0000e-005 | 2.3000e-004 | 1.3000e-004 | 3.6000e-004 | 7.0000e-005 | 1.2000e-004 | 1.9000e-004 | 0.0000 | 1.9195 | 1.9195 | 3.0000e-005 | 0.0000 | 1.9202 |
| Worker | 4.2300e-003 | 1.0900e-003 | 0.0149 | 1.0000e-005 | 3.4000e-004 | 1.0000e-005 | 3.6000e-004 | 9.0000e-005 | 1.0000e-005 | 1.1000e-004 | 0.0000 | 0.6068 | 0.6068 | 7.0000e-005 | 0.0000 | 0.6083 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Total** | **0.0114** | **0.0217** | **0.1091** | **3.0000e-005** | **5.7000e-004** | **1.4000e-004** | **7.2000e-004** | **1.6000e-004** | **1.3000e-004** | **3.0000e-004** | **0.0000** | **2.5263** | **2.5263** | **1.0000e-004** | **0.0000** | **2.5285** |

## 3.5 Building Construction - 2016

### Unmitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.3508 | 2.9362 | 1.9062 | 2.7600e-003 | | 0.2026 | 0.2026 | | 0.1904 | 0.1904 | 0.0000 | 249.4182 | 249.4182 | 0.0619 | 0.0000 | 250.7173 |
| **Total** | **0.3508** | **2.9362** | **1.9062** | **2.7600e-003** | | **0.2026** | **0.2026** | | **0.1904** | **0.1904** | **0.0000** | **249.4182** | **249.4182** | **0.0619** | **0.0000** | **250.7173** |

### Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.0394 | 0.1870 | 5.0000e-005 | 4.8000e-004 | 2.1000e-004 | 6.9000e-004 | 1.4000e-004 | 2.0000e-004 | 3.4000e-004 | 0.0000 | 3.9513 | 3.9513 | 6.0000e-005 | 0.0000 | 3.9526 |
| Worker | 8.1300e-003 | 2.0100e-003 | 0.0278 | 2.0000e-005 | 7.1000e-004 | 3.0000e-005 | 7.4000e-004 | 1.9000e-004 | 3.0000e-005 | 2.2000e-004 | 0.0000 | 1.2202 | 1.2202 | 1.3000e-004 | 0.0000 | 1.2230 |
| **Total** | **0.0218** | **0.0414** | **0.2147** | **7.0000e-005** | **1.1900e-003** | **2.4000e-004** | **1.4300e-003** | **3.3000e-004** | **2.3000e-004** | **5.6000e-004** | **0.0000** | **5.1714** | **5.1714** | **1.9000e-004** | **0.0000** | **5.1755** |

### Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 0.0933 | 0.7170 | 1.8837 | 2.7600e-003 | | 0.0268 | 0.0268 | | 0.0268 | 0.0268 | 0.0000 | 249.4179 | 249.4179 | 0.0619 | 0.0000 | 250.7170 |
| **Total** | **0.0933** | **0.7170** | **1.8837** | **2.7600e-003** | | **0.0268** | **0.0268** | | **0.0268** | **0.0268** | **0.0000** | **249.4179** | **249.4179** | **0.0619** | **0.0000** | **250.7170** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0137 | 0.0394 | 0.1870 | 5.0000e-005 | 4.8000e-004 | 2.1000e-004 | 6.9000e-004 | 1.4000e-004 | 2.0000e-004 | 3.4000e-004 | 0.0000 | 3.9513 | 3.9513 | 6.0000e-005 | 0.0000 | 3.9526 |
| Worker | 8.1300e-003 | 2.0100e-003 | 0.0278 | 2.0000e-005 | 7.1000e-004 | 3.0000e-005 | 7.4000e-004 | 1.9000e-004 | 3.0000e-005 | 2.2000e-004 | 0.0000 | 1.2202 | 1.2202 | 1.3000e-004 | 0.0000 | 1.2230 |
| **Total** | **0.0218** | **0.0414** | **0.2147** | **7.0000e-005** | **1.1900e-003** | **2.4000e-004** | **1.4300e-003** | **3.3000e-004** | **2.3000e-004** | **5.6000e-004** | **0.0000** | **5.1714** | **5.1714** | **1.9000e-004** | **0.0000** | **5.1755** |

## 3.6 Paving - 2016

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Off-Road | 0.0209 | 0.2239 | 0.1482 | 2.2000e-004 | | 0.0126 | 0.0126 | | 0.0116 | 0.0116 | 0.0000 | 21.0138 | 21.0138 | 6.3400e-003 | 0.0000 | 21.1469 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **0.0209** | **0.2239** | **0.1482** | **2.2000e-004** | | **0.0126** | **0.0126** | | **0.0116** | **0.0116** | **0.0000** | **21.0138** | **21.0138** | **6.3400e-003** | **0.0000** | **21.1469** |

## Unmitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.9000e-004 | 1.0000e-004 | 1.3500e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0592 | 0.0592 | 1.0000e-005 | 0.0000 | 0.0594 |
| **Total** | **3.9000e-004** | **1.0000e-004** | **1.3500e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0592** | **0.0592** | **1.0000e-005** | **0.0000** | **0.0594** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Off-Road | 9.1200e-003 | 0.1970 | 0.1693 | 2.2000e-004 | | 6.5400e-003 | 6.5400e-003 | | 6.5400e-003 | 6.5400e-003 | 0.0000 | 21.0138 | 21.0138 | 6.3400e-003 | 0.0000 | 21.1469 |
| Paving | 0.0000 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| **Total** | **9.1200e-003** | **0.1970** | **0.1693** | **2.2000e-004** | | **6.5400e-003** | **6.5400e-003** | | **6.5400e-003** | **6.5400e-003** | **0.0000** | **21.0138** | **21.0138** | **6.3400e-003** | **0.0000** | **21.1469** |

**Mitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 3.9000e-004 | 1.0000e-004 | 1.3500e-003 | 0.0000 | 3.0000e-005 | 0.0000 | 4.0000e-005 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0592 | 0.0592 | 1.0000e-005 | 0.0000 | 0.0594 |
| **Total** | **3.9000e-004** | **1.0000e-004** | **1.3500e-003** | **0.0000** | **3.0000e-005** | **0.0000** | **4.0000e-005** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0592** | **0.0592** | **1.0000e-005** | **0.0000** | **0.0594** |

## 3.7 Architectural Coating - 2016

**Unmitigated Construction On-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4960 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.6800e-003 | 0.0237 | 0.0188 | 3.0000e-005 | | 1.9700e-003 | 1.9700e-003 | | 1.9700e-003 | 1.9700e-003 | 0.0000 | 2.5533 | 2.5533 | 3.0000e-004 | 0.0000 | 2.5596 |
| **Total** | **0.4997** | **0.0237** | **0.0188** | **3.0000e-005** | | **1.9700e-003** | **1.9700e-003** | | **1.9700e-003** | **1.9700e-003** | **0.0000** | **2.5533** | **2.5533** | **3.0000e-004** | **0.0000** | **2.5596** |

**Unmitigated Construction Off-Site**

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |
| **Total** | **1.6000e-004** | **4.0000e-005** | **5.4000e-004** | **0.0000** | **1.0000e-005** | **0.0000** | **1.0000e-005** | **0.0000** | **0.0000** | **0.0000** | **0.0000** | **0.0237** | **0.0237** | **0.0000** | **0.0000** | **0.0238** |

## Mitigated Construction On-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Archit. Coating | 0.4960 | | | | | 0.0000 | 0.0000 | | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Off-Road | 3.0000e-004 | 1.2900e-003 | 0.0183 | 3.0000e-005 | | 4.0000e-005 | 4.0000e-005 | | 4.0000e-005 | 4.0000e-005 | 0.0000 | 2.5533 | 2.5533 | 3.0000e-004 | 0.0000 | 2.5596 |
| **Total** | **0.4963** | **1.2900e-003** | **0.0183** | **3.0000e-005** | | **4.0000e-005** | **4.0000e-005** | | **4.0000e-005** | **4.0000e-005** | **0.0000** | **2.5533** | **2.5533** | **3.0000e-004** | **0.0000** | **2.5596** |

## Mitigated Construction Off-Site

| | ROG | NOx | CO | SO2 | Fugitive PM10 | Exhaust PM10 | PM10 Total | Fugitive PM2.5 | Exhaust PM2.5 | PM2.5 Total | Bio- CO2 | NBio- CO2 | Total CO2 | CH4 | N2O | CO2e |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Category | tons/yr | | | | | | | | | | MT/yr | | | | | |
| Hauling | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Vendor | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0000 |
| Worker | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Total | 1.6000e-004 | 4.0000e-005 | 5.4000e-004 | 0.0000 | 1.0000e-005 | 0.0000 | 1.0000e-005 | 0.0000 | 0.0000 | 0.0000 | 0.0000 | 0.0237 | 0.0237 | 0.0000 | 0.0000 | 0.0238 |

# Attachment 2: Construction Risk Modeling Emissions and Risk Calculations

## San Ignacio Site - Construction Impacts

**San Jose VA - San Ignacio Site, San Jose, CA**

**DPM Construction Emissions and Modeling Emission Rates**

| Construction Year | Activity | DPM (ton/year) | Area Source | DPM Emissions (lb/yr) | DPM Emissions (lb/hr) | DPM Emissions (g/s) | Modeled Area ($m^2$) | DPM Emission Rate ($g/s/m^2$) |
|---|---|---|---|---|---|---|---|---|
| ***2015*** | Construction | 0.1344 | CON_DPM | 268.8 | 0.08183 | 1.03E-02 | 29,966 | 3.44E-07 |
| ***2016*** | Construction | 0.2042 | CON_DPM | 408.4 | 0.12432 | 1.57E-02 | 29,966 | 5.23E-07 |
| ***Total*** | | ***0.3386*** | | ***677*** | ***0.2061*** | ***0.0260*** | | |

**PM2.5 Fugitive Dust Construction Emissions for Modeling**

| Construction Year | Activity | Area Source | PM2.5 Emissions (ton/year) | PM2.5 Emissions (lb/yr) | PM2.5 Emissions (lb/hr) | PM2.5 Emissions (g/s) | Modeled Area ($m^2$) | PM2.5 Emission Rate $g/s/m^2$ |
|---|---|---|---|---|---|---|---|---|
| ***2015*** | Construction | CON_FUG | 0.0836 | 167.2 | 0.05090 | 6.41E-03 | 29,966 | 2.14E-07 |
| ***2016*** | Construction | CON_FUG | 0.00035 | 0.7 | 0.00021 | 2.68E-05 | 29,966 | 8.96E-10 |
| ***Total*** | | | ***0.0840*** | ***167.9*** | ***0.0511*** | ***0.0064*** | | |

Notes:

Emissions assumed to be evenly distributed over each construction areas

| | | |
|---|---|---|
| hr/day = | 9 | (7am - 4pm) |
| days/yr = | 365 | |
| hours/year = | 3285 | |

**San Jose VA - San Ignacio Site, San Jose, CA - Construction Health Impact Summary**

**Maximum Residential Impacts - Unmitigated**

| Construction Year | Unmitigated Emissions: Maximum Concentrations: Exhaust PM2.5/DPM ($\mu g/m^3$) | Maximum Concentrations: Fugitive PM2.5 ($\mu g/m^3$) | Cancer Risk (per million): Child | Cancer Risk (per million): Adult | Hazard Index (-) | Maximum Annual PM2.5 Concentration ($\mu g/m^3$) |
|---|---|---|---|---|---|---|
| 2015 | 0.0066 | 0.0047 | 0.58 | 0.03 | 0.001 | 0.011 |
| 2016 | 0.0100 | 0.0000 | 0.88 | 0.05 | 0.002 | 0.010 |
| Total | - | - | **1.5** | **0.1** | - | - |
| Maximum Annual | 0.0100 | 0.0047 | - | - | **0.002** | **0.01** |

**San Jose VA - San Ignacio Site, San Jose, CA - Construction Impacts**
**Maximum DPM Cancer Risk Calculations From Construction**
**Off-Site Residential Receptor Locations - 1.5 meters**

Cancer Risk (per million) = CPF x Inhalation Dose x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$

Inhalation Dose = $C_{air}$ x DBR x A x EF x ED x $10^{-6}$ / AT

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
ED = Exposure duration (years)
AT = Averaging time period over which exposure is averaged.
$10^{-6}$ = Conversion factor

**Values**

| Parameter | Child | Adult |
|---|---|---|
| CPF = | 1.10E+00 | 1.10E+00 |
| DBR = | 581 | 302 |
| A = | 1 | 1 |
| EF = | 350 | 350 |
| AT = | 25,550 | 25,550 |

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | Child - Exposure Information | | | | Adult - Exposure Information | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Modeled | | | | | |
| Exposure | Exposure Duration | DPM Conc (ug/m3) | | Exposure Adjust | Child Cancer Risk | DPM Conc (ug/m3) | | Exposure Adjust | Adult Cancer Risk | Fugitive | Total |
| Year | (years) | Year | Annual | Factor | (per million) | Year | Annual | Factor | (per million) | PM2.5 | PM2.5 |
| 1 | 1 | 2015 | 0.0066 | 10 | 0.58 | 2015 | 0.0066 | 1 | 0.03 | 0.0047 | 0.011 |
| 2 | 1 | 2016 | 0.0100 | 10 | 0.88 | 2016 | 0.0100 | 1 | 0.05 | 0.0000 | 0.010 |
| 3 | 1 | | 0.0000 | 4.75 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 4 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 5 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 6 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 7 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 8 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 9 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 10 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 11 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 12 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 13 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 14 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 15 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 16 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 17 | 1 | | 0.0000 | 1.5 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 18 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| 65 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 66 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 67 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 68 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 69 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 70 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| **Total Increased Cancer Risk** | | | | | **1.46** | | | | **0.08** | | |

## Silver Creek Site - Construction Impacts

**San Jose VA - Silver Creek Site, San Jose, CA**

**DPM Construction Emissions and Modeling Emission Rates**

| Construction Year | Activity | DPM (ton/year) | Area Source | DPM Emissions (lb/yr) | DPM Emissions (lb/hr) | DPM Emissions (g/s) | Modeled Area ($m^2$) | DPM Emission Rate ($g/s/m^2$) |
|---|---|---|---|---|---|---|---|---|
| ***2015*** | Construction | 0.1573 | CON_DPM | 314.6 | 0.09577 | 1.21E-02 | 23,610 | 5.11E-07 |
| ***2016*** | Construction | 0.2042 | CON_DPM | 408.4 | 0.12432 | 1.57E-02 | 23,610 | 6.63E-07 |
| ***Total*** | | ***0.3615*** | | ***723*** | ***0.2201*** | ***0.0277*** | | |

**PM2.5 Fugitive Dust Construction Emissions for Modeling**

| Construction Year | Activity | Area Source | PM2.5 Emissions (ton/year) | PM2.5 Emissions (lb/yr) | PM2.5 Emissions (lb/hr) | PM2.5 Emissions (g/s) | Modeled Area ($m^2$) | PM2.5 Emission Rate $g/s/m^2$ |
|---|---|---|---|---|---|---|---|---|
| ***2015*** | Construction | CON_FUG | 0.0837 | 167.4 | 0.05096 | 6.42E-03 | 23,610 | 2.72E-07 |
| ***2016*** | Construction | CON_FUG | 0.00035 | 0.7 | 0.00021 | 2.68E-05 | 23,610 | 1.14E-09 |
| ***Total*** | | | ***0.0841*** | ***168.1*** | ***0.0512*** | ***0.0064*** | | |

Notes:

Emissions assumed to be evenly distributed over each construction areas

| | | |
|---|---|---|
| hr/day = | 9 | (7am - 4pm) |
| days/yr = | 365 | |
| hours/year = | 3285 | |

**DPM Construction Emissions and Modeling Emission Rates - With Mitigation**

| Construction Year | Activity | DPM (ton/year) | Area Source | DPM Emissions (lb/yr) | DPM Emissions (lb/hr) | DPM Emissions (g/s) | Modeled Area ($m^2$) | DPM Emission Rate ($g/s/m^2$) |
|---|---|---|---|---|---|---|---|---|
| ***2015*** | Construction | 0.0285 | CON_DPM | 57.0 | 0.01735 | 2.19E-03 | 23,610 | 9.26E-08 |
| ***2016*** | Construction | 0.0337 | CON_DPM | 67.4 | 0.02052 | 2.59E-03 | 23,610 | 1.09E-07 |
| ***Total*** | | ***0.0622*** | | ***124*** | ***0.0379*** | ***0.0048*** | | |

Notes:

Emissions assumed to be evenly distributed over each construction areas

| | | |
|---|---|---|
| hr/day = | 9 | (7am - 4pm) |
| days/yr = | 365 | |
| hours/year = | 3285 | |

**PM2.5 Fugitive Dust Construction Emissions for Modeling - With Mitigation**

| Construction Year | Activity | Area Source | PM2.5 Emissions (ton/year) | PM2.5 Emissions (lb/yr) | PM2.5 Emissions (lb/hr) | PM2.5 Emissions (g/s) | Modeled Area ($m^2$) | PM2.5 Emission Rate $g/s/m^2$ |
|---|---|---|---|---|---|---|---|---|
| ***2015*** | Construction | CON_FUG | 0.0190 | 38.0 | 0.01157 | 1.46E-03 | 23,610 | 6.17E-08 |
| ***2016*** | Construction | CON_FUG | 0.00035 | 0.7 | 0.00021 | 2.68E-05 | 23,610 | 1.14E-09 |
| ***Total*** | | | ***0.0194*** | ***38.7*** | ***0.0118*** | ***0.0015*** | | |

Notes:

Emissions assumed to be evenly distributed over each construction areas

| | | |
|---|---|---|
| hr/day = | 9 | (7am - 4pm) |
| days/yr = | 365 | |
| hours/year = | 3285 | |

**San Jose VA - Silver Creek Site, San Jose, CA - Construction Health Impact Summary**

**Maximum Residential Impacts - Unmitigated**

| Construction Year | Unmitigated Emissions | | | | | |
|---|---|---|---|---|---|---|
| | Maximum Concentrations | | Cancer Risk (per million) | | Hazard Index | Maximum Annual PM2.5 Concentration |
| | Exhaust PM2.5/DPM ($\mu g/m^3$) | Fugitive PM2.5 ($\mu g/m^3$) | Child | Adult | (-) | ($\mu g/m^3$) |
| 2015 | 0.1734 | 0.1269 | 15.18 | 0.79 | 0.035 | 0.300 |
| 2016 | 0.2251 | 0.0005 | 19.71 | 1.02 | 0.045 | 0.226 |
| Total | - | - | **34.9** | **1.8** | - | - |
| Maximum Annual | 0.2251 | 0.1269 | - | - | **0.045** | **0.30** |

**Maximum Residential Impacts - Mitigated**

| Construction Year | Mitigated Emissions | | | | | |
|---|---|---|---|---|---|---|
| | Maximum Concentrations | | Cancer Risk (per million) | | Hazard Index | Maximum Annual PM2.5 Concentration |
| | Exhaust PM2.5/DPM ($\mu g/m^3$) | Fugitive PM2.5 ($\mu g/m^3$) | Child | Adult | (-) | ($\mu g/m^3$) |
| 2015 | 0.0314 | 0.0288 | 2.75 | 0.14 | 0.006 | 0.060 |
| 2016 | 0.0370 | 0.0005 | 3.24 | 0.17 | 0.007 | 0.038 |
| Total | - | - | **6.0** | **0.3** | - | - |
| Maximum Annual | 0.0370 | 0.0288 | - | - | **0.007** | **0.06** |

**San Jose VA - Silver Creek Site, San Jose, CA - Construction Impacts**
**Maximum DPM Cancer Risk Calculations From Construction**
**Off-Site Residential Receptor Locations - 1.5 meters**

Cancer Risk (per million) = CPF x Inhalation Dose x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$

Inhalation Dose = $C_{air}$ x DBR x A x EF x ED x $10^{-6}$ / AT

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
ED = Exposure duration (years)
AT = Averaging time period over which exposure is averaged.
$10^{-6}$ = Conversion factor

**Values**

| Parameter | Child | Adult |
|---|---|---|
| CPF = | 1.10E+00 | 1.10E+00 |
| DBR = | 581 | 302 |
| A = | 1 | 1 |
| EF = | 350 | 350 |
| AT = | 25,550 | 25,550 |

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | Child - Exposure Information | | | Child | Adult - Exposure Information | | | Adult | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Modeled | | | | | |
| Exposure | Exposure Duration | DPM Conc (ug/m3) | | Exposure Adjust | Cancer Risk | DPM Conc (ug/m3) | | Exposure Adjust | Cancer Risk | Fugitive | Total |
| Year | (years) | Year | Annual | Factor | (per million) | Year | Annual | Factor | (per million) | PM2.5 | PM2.5 |
| 1 | 1 | 2015 | 0.1734 | 10 | 15.18 | 2015 | 0.1734 | 1 | 0.79 | 0.1269 | 0.300 |
| 2 | 1 | 2016 | 0.2251 | 10 | 19.71 | 2016 | 0.2251 | 1 | 1.02 | 0.0005 | 0.226 |
| 3 | 1 | | 0.0000 | 4.75 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 4 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 5 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 6 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 7 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 8 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 9 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 10 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 11 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 12 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 13 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 14 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 15 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 16 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 17 | 1 | | 0.0000 | 1.5 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 18 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| 65 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 66 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 67 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 68 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 69 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 70 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| **Total Increased Cancer Risk** | | | | | **34.89** | | | | **1.81** | | |

**San Jose VA - Silver Creek Site, San Jose, CA - Construction Impacts- Mitigated Emissions**
**Maximum DPM Cancer Risk Calculations From Construction**
**Off-Site Residential Receptor Locations - 1.5 meters**

Cancer Risk (per million) = CPF x Inhalation Dose x 1.0E6

Where: CPF = Cancer potency factor $(mg/kg\text{-}day)^{-1}$

Inhalation Dose = $C_{air}$ x DBR x A x EF x ED x $10^{-6}$ / AT

Where: $C_{air}$ = concentration in air ($\mu g/m^3$)
DBR = daily breathing rate (L/kg body weight-day)
A = Inhalation absorption factor
EF = Exposure frequency (days/year)
ED = Exposure duration (years)
AT = Averaging time period over which exposure is averaged.
$10^{-6}$ = Conversion factor

**Values**

| Parameter | Child | Adult |
|---|---|---|
| CPF = | 1.10E+00 | 1.10E+00 |
| DBR = | 581 | 302 |
| A = | 1 | 1 |
| EF = | 350 | 350 |
| AT = | 25,550 | 25,550 |

**Construction Cancer Risk by Year - Maximum Impact Receptor Location**

| | | Child - Exposure Information | | | | Adult - Exposure Information | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Child | | Modeled | | | Adult | | |
| Exposure | Exposure Duration | DPM Conc (ug/m3) | | Exposure Adjust | Cancer Risk | DPM Conc (ug/m3) | | Exposure Adjust | Cancer Risk | Mitigated Fugitive | Total |
| Year | (years) | Year | Annual | Factor | (per million) | Year | Annual | Factor | (per million) | PM2.5 | PM2.5 |
| 1 | 1 | 2015 | 0.0314 | 10 | 2.75 | 2015 | 0.0314 | 1 | 0.14 | 0.0288 | 0.060 |
| 2 | 1 | 2016 | 0.0370 | 10 | 3.24 | 2016 | 0.0370 | 1 | 0.17 | 0.0005 | 0.038 |
| 3 | 1 | | 0.0000 | 4.75 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 4 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 5 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 6 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 7 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 8 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 9 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 10 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 11 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 12 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 13 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 14 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 15 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 16 | 1 | | 0.0000 | 3 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 17 | 1 | | 0.0000 | 1.5 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 18 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| .• | .• | .• | .• | .• | .• | .• | .• | .• | .• | | |
| 65 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 66 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 67 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 68 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 69 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| 70 | 1 | | 0.0000 | 1 | 0.00 | | 0.0000 | 1 | 0.00 | | |
| **Total Increased Cancer Risk** | | | | | **5.99** | | | | **0.31** | | |

# APPENDIX D

## CULTURAL RESOURCES SUPPORTING INFORMATION

**NATIVE AMERICAN HERITAGE COMMISSION**
1550 Harbor Blvd., ROOM 100
West SACRAMENTO, CA 95691
(916) 373-3710
Fax (916) 373-5471

April 30, 2015

Sally Rideout
EMC Planning Group Inc.
301 Lighthouse Avenue, Suite C
Monterey , CA 93940

Sent by Fax: (831) 649-8399
Number of Pages: 3

Re: Department of Veterans Affairs (VA) Proposed Outpatient Clinic, San Jose, Santa Clara County.

Dear Ms. Rideout,

A record search of the sacred land file has failed to indicate the presence of Native American cultural resources in the immediate project area. The absence of specific site information in the sacred lands file does not indicate the absence of cultural resources in any project area. Other sources of cultural resources should also be contacted for information regarding known and recorded sites.

Enclosed is a list of Native Americans individuals/organizations who may have knowledge of cultural resources in the project area. The Commission makes no recommendation or preference of a single individual, or group over another. This list should provide a starting place in locating areas of potential adverse impact within the proposed project area. I suggest you contact all of those indicated, if they cannot supply information, they might recommend others with specific knowledge. By contacting all those listed, your organization will be better able to respond to claims of failure to consult with the appropriate tribe or group. If a response has not been received within two weeks of notification, the Commission requests that you follow-up with a telephone call to ensure that the project information has been received.

If you receive notification of change of addresses and phone numbers from any of these individuals or groups, please notify me. With your assistance we are able to assure that our lists contain current information. If you have any questions or need additional information, please contact me at (916) 373-3712.

Sincerely,

Katy Sanchez

Katy Sanchez
Associate Government Program Analyst

**Native American Contact List**
**Santa Clara County**
**April 30, 2015**

Jakki Kehl
[redacted]
Ohlone/Costanoan

Amah MutsunTribal Band
Edward Ketchum
[redacted]
Ohlone/Costanoan
Northern Valley Yokuts

Trina Marine Ruano Family
Ramona Garibay, Representative
[redacted]
Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

Muwekma Ohlone Indian Tribe of the SF Bay Area
Rosemary Cambra, Chairperson
[redacted]
Ohlone / Costanoan

Amah MutsunTribal Band
Valentin Lopez, Chairperson
[redacted]
Ohlone/Costanoan
Northern Valley Yokuts

The Ohlone Indian Tribe
Andrew Galvan
[redacted]
Ohlone/Costanoan
Bay Miwok
Plains Miwok
Patwin

(510) 687-9393 Fax

Amah MutsunTribal Band of Mission San Juan Bautista
Irenne Zwierlein, Chairperson
[redacted]
Ohlone/Costanoan

Indian Canyon Mutsun Band of Costanoan
Ann Marie Sayers, Chairperson
[redacted]
Ohlone/Costanoan

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

**This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Department of Veterans Affairs (VA) Proposed Outpatient Clinic, San Jose, Santa Clara County.**

**Native American Contact List**
**Santa Clara County**
**April 30, 2015**

Linda G. Yamane
[redacted] Ohlone/Costanaon

Amah MutsunTribal Band of Mission San Juan Bautista
Michelle Zimmer
[redacted] Ohlone/Costanoan

**This list is current only as of the date of this document.**

**Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.**

**This list is only applicable for contacting locative Americans with regard to cultural resources for the proposed Department of Veterans Affairs (VA) Proposed Outpatient Clinic, San Jose, Santa Clara County.**

**DEPARTMENT OF VETERANS AFFAIRS**
**Palo Alto Health Care System**
**3801 Miranda Ave.**
**Palo Alto, CA 94304**

APR 13 2015

In reply refer to: 640/720

Ms. Carol Roland-Nawi, Ph.D.
California State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Dr. Roland-Nawi:

SUBJECT: SECTION 106 CONSULTATION FOR THE DEPARTMENT OF VETERANS AFFAIRS OUTPATIENT CLINIC PROJECT, SAN JOSE, CALIFORNIA

The purpose of this letter is to inform you that the Department of Veterans Affairs (VA), Office of Construction & Facilities Management, Real Property Services and VA Palo Alto Health Care System (VAPAHCS) plans to lease property in San Jose, California for the construction and operation of a Community Based Outpatient Clinic (CBOC), located at 5855 Silver Creek Valley Place, San Jose, California (see Enclosure 1).

This undertaking and its effects are being considered under Section 106 of the National Historic Preservation Act (NHPA) of 1966, as amended, and implementing regulations 36 CFR 800. VA is initiating consultation for this undertaking, seeking concurrence with the proposed project Area of Potential Effects (APE), and soliciting comments on a proposed archaeological work plan to define historic properties potentially located within the project site. VA is also preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA). VA is assessing the effects of this undertaking in conjunction with the EA preparation.

**Undertaking**

The undertaking comprises of a VA property lease for the construction and operation of a new CBOC in the City of San Jose, California. VA would then enter into a build-to-suit lease agreement with a selected developer who would design and build the new CBOC to VA standards and consistent with local planning regulations, which would then be leased to the VA. Upon receiving a certificate of occupancy from the municipality, VA will occupy the space under a lease for a term up to 20 years. During this lease term, the owner (developer or other if the initial developer sells the building) will provide a full service facility. Included in the services are all operating expenses, interior and exterior janitorial services, general building maintenance, and capital improvements needed for all building systems. Upon expiration of the lease, the VA may choose to extend the agreement or vacate the property.

The undertaking would occur on an approximate nine-acre parcel located at 5855 Silver Creek Valley Place, San Jose, California (VA Project Site). The site is bounded by U.S. Route 101 to the west, vacant land and Silver Creek Valley Road to the north, Silver Creek Valley Place and low density residential use to the east, and a vacant parcel to the south. Existing land uses in the vicinity of the Silver Creek Valley Place site include the Coyote Creek channel and trail system with a staging area on Silver Creek Valley Place, an industrial business park further to the east, residential uses north of Silver Creek Valley Road, and vacant land to the south and southeast. The VA Project Site is currently vacant.

The CBOC would be comprised of a new 72,000 square foot three-story building covering approximately 95,000 square feet of the site. In addition, the undertaking would include the construction of 387 on-site parking spaces, 20 bicycle parking spaces, landscaping, and related infrastructure improvements. Other amenities include landscaped outdoor seating areas, a patio with food service, an outdoor physical therapy/healing garden, a memorial plaza at the front of the building, bio-swale drainage improvements, and large canopy tree plantings (see Enclosure 2).

The new CBOC would replace VA's existing San Jose CBOC, located at 80 Great Oaks Boulevard, San Jose, California. The existing facility's lease is due to expire in 2016, and the existing site lacks available space for future expansion/improvements. VA is seeking to replace the existing CBOC with a new state-of-the-art health care facility to provide improved healthcare services and to locate needed services closer to existing Veteran populations. The CBOC would improve healthcare access and address the need to provide ongoing primary care, mental health and specialty care services to Veterans who currently reside in Santa Clara County.

**Other Site Alternatives Explored**

In 2012, VA began a search within the San Jose/Santa Clara County service area to lease space or acquire land suitable to accommodate the construction of a new CBOC. A total of 27 potential sites were initially evaluated against the VA standards for outpatient facilities. To be considered, land sites were required to be capable of accommodating a three-story structure of 72,000 net usable square feet in size, on-site parking for up to approximately 520 vehicles, and land area sufficient to meet current security setback requirements. Land with existing buildings that met the minimum building and parking standards were included in the considerations. Of the 27 sites initially surveyed, 25 were found to meet some, but not all of the minimum criteria, or possessed certain features that were immediately identified by the VA as potentially cost-prohibitive and one site was sold to another developer and eliminated from consideration. The remaining Silver Creek Valley Place site has been selected by VA as the preferred project site and is the subject of this consultation.

**Area of Potential Effect**

The APE is the approximate nine-acre Silver Creek Valley Place site, which includes the proposed construction footprint and all areas where potential project-related effects may occur, plus a limited area outside of the property parcel that encompass the known boundary of a prehistoric and historic archaeological site (see Enclosure 3). Note that no current or future VA

related development or construction activities would take place outside of the nine-acre Silver Creek Valley Place site. The APE was determined based upon the extent of ground disturbance assumed as part of the undertaking and consideration of other resources in the area.

**Identification of Historic Properties**

In November 2014, on behalf of VA, William Self Associates, Inc. (WSA) conducted an archaeological study of the APE (see Enclosure 4). The archaeological study consisted of an archaeological records search conducted by the Northwest Information Center at Sonoma State University (NWIC) and a pedestrian archaeological survey of the proposed VA Project Site. In addition, due to questions regarding the exact location of archaeological resources potentially located on or near the site, WSA conducted additional literature research.

As a result of the study and records search, two archaeological sites (P-43-000252 and P-43-000339) were identified as being previously recorded within the APE and four archaeological sites (P-43-000072, P-43-000340, P-43-000343, and P-43-000202) have been previously recorded within one quarter mile of the APE (see Enclosure 4). The two archaeological sites partially located within the APE are described below.

*P-43-000252 (CA-SCL-000242)*

Prehistoric archaeological site P-43-000252 is located within the southeast boundary of the APE and potentially extends onto the VA Project Site, to the north of US Route 101. The archaeological site was originally recorded by California Department of Transportation (Caltrans) in 1976. This record describes the site as a "large quantity of fire cracked rock, some lithics and lithic debitage". The location recorded in 1976 was tested in 1977, when eight test units were excavated within the Caltrans right-of-way (Dietz 1977). Although little cultural material was recovered from the testing effort, Dietz noted that the portion of the site tested within the Caltrans right-of-way did not represent the main portion of the site, and recommended that it lay to the north (Kaptain and Groza 2003). Dietz nominated this site for listing in the National Register of Historic Places (NRHP) in 1978, and "concurrence of eligibility was given by the Keeper of the National Register in 1978" (Valasik and Sikes 2013).

In 1976, Caltrans recorded the original site location as being south of US Route 101, outside the proposed VA Project Site (Meandry1976). However, subsequent archaeological studies depict it in various configurations on the north side of US Route 101, which is where it is currently depicted per the location information provided by the NWIC and would place it within the boundary of the VA Project Site.

To date, all of the pedestrian archaeological surveys conducted in the project area have identified only surficial finds. Such finds are typical of discontinuous creek side deposits along Coyote Creek and may not be associated with P-43-000252. However, they are indicative of the APE's potential sensitivity for subsurface prehistoric deposits.

Subsequent to the submission of WSA's 2014 survey report, additional information not identified in the NWIC records search about the location of P-43-000252 was provided to WSA

and VA by Dr. Colin Busby of Basin Research Associates, who was hired to represent the existing Silver Creek Valley Place property owner. Due to the questions raised regarding the actual location of P-43-000252, and the dearth of evidence observed during WSA's pedestrian archaeological survey of the site's location as it is presently recorded, WSA conducted supplemental literature research and consultation with Dr. Colin Busby. This additional research determined that between 1976 and 2014, archaeological site P-43-000252 has been recorded in 12 different locations, 8 of which were recorded south of the VA Project Site and 4 of which extend, at least to some degree, into the VA Project Site (see Enclosure 5).

The undertaking (i.e., construction-related ground disturbing activities) has the potential to adversely affect P-43-000252 if it is in the location as currently mapped. As discussed above, there is conflicting information regarding the actual location and extent of the site. As the first step in considering possible effects, it is necessary to determine whether, in fact, site P-43-000252 is actually present within the proposed VA Project Site. As a result, VA plans to implement a presence/absence test coring program within the archaeological site boundary (located within the Project Site only) that is depicted on the updated site record (Valasik and Sikes 2013) and as currently mapped by the NWIC. The purpose of the coring program is to determine if P-43-000252 is located within the VA Project Site, identify its boundary, and support the Section 106 process. The coring program will attempt to clarify the ambiguity created by the multiple site locations recorded over the past 38 years.

A work plan for the proposed testing, including project background, research design and work plan, curation plan, Native American coordination, references cited, maps, and site records is included as Enclosure 6.

*P-43-000339 (CA-SCL-000332H)*

Historic archaeological site P-43-000339 is located along the western boundary of the APE and extends slightly into the VA project site. The archaeological site was recorded in 1978 as a historic homestead (Laffey 1978a). A house associated with the Kuckenbeiser and Kellner families stood on the site from the 1880s, but was moved to the southeast sometime in the 1960s. According to Laffey (1978a) foundation and trash pits may remain on the surface, and there may be underground deposits such as privies. Although very little surficial evidence of the historic archaeological site was identified during WSA's pedestrian survey of the project area, the possibility exists that subsurface deposits may be present that could provide information about the 1880s historic homestead, and its occupants. As far as can be determined, the site has never been tested or evaluated for NRHP eligibility.

VA proposes to conduct an archaeological testing program within that portion of the recorded site boundary of P-43-000339 that extends into the proposed VA project site. If a portion of the archaeological site is identified within the VA project site, VA will conduct the archaeological testing program presented below to determine its areal extent and to make a preliminary assessment as to whether it is a potential historic property.

The proposed testing plan (see Enclosure 6) details the proposed work to be conducted during the archaeological investigation, including project background, research design and work plan, curation plan, Native American coordination, references cited, maps, and site records.

**Other Consulting Parties**

VA has requested an updated list of Native American Contacts from the California Native American Heritage Commission (NAHC) and will coordinate with interested Tribal communities, as appropriate. Since proposed testing has the potential to minimally disturb a prehistoric archaeological site, VA will coordinate with Tribal community members to see if there is interest to participate as a Native American monitor during the proposed testing program, as appropriate. No other consulting parties have been identified at this time.

**Summary**

VA is currently seeking concurrence with the proposed APE and any comments on the attached archaeological work plan. As we progress through the NHPA Section 106 process, VAPAHCS will continue to coordinate with your office and share information about the proposed undertaking, including the findings of the archaeological investigation, determination/definition of historic properties potentially effected, assessment of effects, and, if necessary, resolution of adverse effects.

Should you have questions or need additional information, please contact Mr. Ronald Bochenek, at the address above, (650) 493-5000, extension 62861 or email at ronald.bochenek@va.gov.

Sincerely,

Elizabeth Joyce Freeman
Director

Enclosures: (1) Site Location
(2) Proposed Undertaking
(3) Area of Potential Effect
(4) 2014 Archaeological Survey Report
(5) Memorandum: Location of Archaeological Site P-43-000252
(6) Archaeological Work Plan


**Enclosure 1: Site Location (5855 Silver Creek Valley Place, San Jose, California)**


## Enclosure 2: Proposed Undertaking

**DEPARTMENT OF VETERANS AFFAIRS**
**Palo Alto Health Care System**
**3801 Miranda Ave.**
**Palo Alto, CA 94304**

MAY 27 2015

In reply refer to: 640/720

Ms. Carol Roland-Nawi, Ph.D.
California State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Dr. Roland-Nawi:

SUBJECT: SECTION 106 CONSULTATION FOR THE DEPARTMENT OF VETERANS AFFAIRS OUTPATIENT CLINIC PROJECT, SAN JOSE, CALIFORNIA

Pursuant to Section 106 of the National Historic Preservation Act (NHPA), Department of Veterans Affairs (VA) is continuing coordination with your office in support of our proposed undertaking to lease property in San Jose, California for the construction and operation of a Community Based Outpatient Clinic (CBOC), located at 5855 Silver Creek Valley Place (VA project site), San Jose, California. VA is also preparing an Environmental Assessment (EA) in accordance with the National Environmental Policy Act (NEPA).

VA initiated consultation with your office in a letter dated April 13, 2015. The initiation letter identified and sought concurrence with the undertakings area of potential effects (APE) and to solicit any comments on a proposed archaeological work plan to define historic properties potentially located within the VA project site. Subsequently, VA and their environmental consultants met with California Office of Historic Preservation (OHP) staff on April 15, 2015, to discuss and revise the proposed work plan. Following this meeting, VA revised the work plan and resubmitted to OHP staff for review. On April 30, 2015, VA received email concurrence for the proposed work plan and the archaeological testing was completed on May 1, 2015.

In addition, following the April 15, 2015, meeting with OHP staff, VA discovered that the western project site boundary was incorrectly identified on property maps and is actually located approximately 50-feet east of the western boundary that was identified in the VA's initiation letter (see Enclosure 1). Due to the change in property boundary, VA did not conduct testing for historic archaeological site (i.e., P-43-000339 [CA-SCL-000332H]), as identified in the work plan. The proposed testing of this site, which was previously believed to be potentially located within the VA project site, was not implemented since it has been recorded to be located outside the VA project site and on private property.

This letter serves to inform you of the findings of our archaeological testing and to document our finding of effects. VA is requesting your review and concurrence with our determination of effects.

**Undertaking**

The undertaking comprises of a VA property lease for the construction and operation of a new CBOC in the City of San Jose, California. VA would then enter into a build-to-suit lease agreement with a selected developer who would design and build the new CBOC to VA standards and consistent with local planning regulations, which would then be leased to VA. Upon receiving a certificate of occupancy from the municipality, VA will occupy the space under a lease for a term up to 20 years. Upon expiration of the lease the VA may choose to extend the agreement or vacate the property. For more information on the undertaking and a discussion of alternative sites explored, refer to VA's letter dated April 13, 2015.

**Area of Potential Effects**

The APE is the approximate 5.6-acre VA project site (i.e., 5855 Silver Creek Valley Place) and all areas where potential project-related effects may occur, plus a limited area outside of the property parcel that encompass the known boundary of a prehistoric and historic archaeological site (see Enclosure 1). Note that no current or future VA related development or construction activities would take place outside of the 5.6-acre project site. The APE was determined based upon the extent of ground disturbance assumed as part of the undertaking and consideration of other resources in the area.

**Identification of Historic Properties**

In November 2014, on behalf of VA, William Self Associates, Incorporated (WSA) conducted an archaeological study of the project site. The archaeological study consisted of an archaeological records search conducted by the Northwest Information Center at Sonoma State University (NWIC) and a pedestrian archaeological survey of the proposed VA Project Site. In addition, due to questions regarding the exact location of archaeological resources potentially located on or near the site, WSA conducted additional literature research.

As a result of the study and records search, one prehistoric archaeological site (i.e., P-43-000252) was identified as being previously recorded partially within and adjacent to the project site and five archaeological sites (i.e., P-43-000339, P-43-000072, P-43-000340, P-43-000343, and P-43-000202) have been previously recorded within ¼ mile of the project site (see Enclosure 2).

During additional research of the site, additional information not identified in the NWIC records search about the location of P-43-000252 was provided to WSA and VA by Dr. Colin Busby of Basin Research Associates, who was hired to represent the existing Silver Creek Valley Place property owner. Due to the questions raised regarding the actual location of P-43-000252, and the dearth of evidence observed during WSA's pedestrian archaeological survey of the site's location as it is presently recorded, WSA conducted supplemental literature research and

consultation with Dr. Colin Busby. This additional research determined that between 1976 and 2014, archaeological site P-43-000252 has been recorded in 12 different locations, eight of which were recorded south of the VA Project Site and four of which extend, at least to some degree, into the VA project site (see Enclosure 3, Figure 1).

In consultation with your office, as identified above, on May 1, 2015, VA implemented a presence/absence test coring program within the archaeological site boundary as it is currently depicted in the NWIC's records to determine if P-43-000252 is actually present within the project site, to identify its extent, and support the NHPA Section 106 process. The coring program attempted to clarify the ambiguity created by the multiple site locations recorded over the past 38 years.

As a result of the May 1, 2015, archaeological testing, no evidence of P-43-000252 was identified within the VA project site. These results indicate that no known archaeological properties are present within the project site and that the previously identified prehistoric site (P-43-000252) is likely located outside of the property boundaries of the VA's project site. Additional information on about the identification of historic properties, including the results of the archaeological testing and archaeological work plan is included in VA's April 13, 2015, letter, Enclosure 3 (Archaeological Work Plan), and Enclosure 4 (Archaeological Testing Report).

**Determination of Effects**

Based on these testing results, VA has determined that no known historic properties are present within the project site and, therefore, no historic properties would be affected by the undertaking.

However, based on the overall sensitivity of the larger region, including the adjacent archaeological sites (i.e., P-43-000252 and P-43-000339) to the project site, a qualified archaeological monitor, meeting the Secretary of Interior's Professional Qualification Standards for Archaeology, will provide construction staff archaeological awareness training prior to construction-related ground disturbing activities. Training would include informing construction staff to identify potential cultural resources and the procedures to be followed in the event that resources are inadvertently discovered.

In the unlikely event of an inadvertent discovery of previously undocumented archaeological resources or human remains, consultation with the SHPO, in accordance with 36 CFR 800.13, will occur and the following management measure will be followed.

> *If an inadvertent discovery of cultural materials (e.g., unusual amounts of shell, animal bone, bottle glass, ceramics, structure/building remains) or human remains is made during construction activities associated with the undertaking, ground disturbances in the area of the find will be halted and appropriate VA personnel and a qualified professional archaeologist will be notified regarding the discovery. In coordination with SHPO, VA will determine whether the resource is potentially significant per the evaluation criteria of the NHPA and will develop appropriate mitigation. If human remains are encountered, the Santa Clara County Coroner will be notified immediately upon their discovery. If the coroner determines that*

*the remains are of Native American origin, the provisions of NAGPRA or other related federal, state, or local laws may apply.*

**Other Consulting Parties**

VA is assessing the effects of this undertaking in conjunction with the preparation of a NEPA EA, including an agency required Draft EA 30-day public review/comment period. The 30-day public review/comment period for the Draft EA is anticipated to begin early June 2015. The Draft EA will be available for public download at the following VAPAHCS website (http://www.paloalto.va.gov/resplanning.asp). Any interested member of the public, including Tribal communities will have the opportunity to comment on the undertaking at this time. No other consulting parties have been identified at this time.

**Summary**

In accordance with Section 106 of the NHPA of 1966, as amended, VA requests your review of this undertaking and looks forward to receiving your concurrence in our determination of no historic properties affected. Should you have questions or need additional information, please contact Mr. Ronald Bochenek, at the address above or (650) 493-5000, extension 62861 or email at ronald.bochenek@va.gov.

Sincerely,

Elizabeth Joyce Freeman
Director

Enclosures: (1) VA Project Site/APE
(2) Other Known Archaeological Sites in Area
(3) Archaeological Work Plan
(4) Archaeological Testing Report

**OFFICE OF HISTORIC PRESERVATION**
**DEPARTMENT OF PARKS AND RECREATION**
1725 23rd Street, Suite 100
SACRAMENTO, CA 95816-7100
(916) 445-7000 Fax: (916) 445-7053
calshpo@parks.ca.gov
www.ohp.parks.ca.gov

July 13, 2015 Reply in Reference To: VA_2015_0414_001

Elizabeth Joyce Freeman, Director
Department of Veteran Affairs
Palo Alto Health Care System
3801 Miranda Avenue
Palo Alto, CA 94304

Re: Section 106 Consultation for the Department of Veterans Affairs (VA) Outpatient Clinic Project, San Jose, CA

Dear Director Freeman:

Thank you for continuing consultation on behalf of the Department of Veteran's Affairs (VA) regarding their efforts to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation found at 36 CFR Part 800.Pursuant to 36 CFR Part 800.4, the VA have submitted a the following documents in support of the above referenced undertaking:

- *Archaeological Work Plan for the Department of Veterans Affairs Outpatient Clinic Project, Santa Clara County, California* (WSA 2015)
- *Archaeological Testing Report for the Department of Veterans Affairs Outpatient Clinic Project, San Jose, Santa Clara County, California* (WSA 2015)

The VA proposes to construct and operate a Community Based Outpatient Clinic (CBOC) at 5855 Silver Creek Valley Place in San Jose, California. The VA has defined the APE as the approximate 5.6-acre project site and all areas where potential project-related effects may occur, plus a limited area outside of the parcel that encompasses the known boundary of one prehistoric site (P-34-000252) that may continue into the project site.

The VA initiated consultation with my office in a letter dated April 13, 2015 indicating that a records search resulted in the identification of one prehistoric site within the APE (P-34-000252, a prehistoric midden site), but that only one isolate had been observed on the surface of the APE during a pedestrian survey. Therefore, the VA proposed to carry out subsurface testing and submitted a draft work plan for this undertaking. This consultation resulted in my office requesting revised methods for testing the subsurface sensitivity of the APE to include broader, less focused coverage of the APE. Following a meeting between Jessica Tudor of my staff, the VA, and William Self Associates (WSA) on April 21, 2015, the VA provided a revised work plan that was approved by my office via e-mail on April 30, 2015. The revised work plan included a presence/absence coring program within the APE to determine if a previously recorded site (P-43-000252) that had been recorded in several conflicting locations by various archaeological projects in the past extended into the APE for this undertaking. Additionally, a historic-era site (P-43-000339/CA-SCL-000332H) was previously identified on property maps as being located immediately adjacent to the APE. However, further research led to the VA discovering that the site is actually located approximately 50-feet east of the APE and does not extend into the project site. The VA contacted the Native American Heritage Commission (NAHC) in April, 2015 to obtain a list of potentially interested Native American contacts for the undertaking and have indicated that they have invited their participation in the testing program.

The *Archaeological Testing Report* details that 12 core samples were extracted to a depth of 12 feet below the ground surface within the previously recorded boundaries of P-43-000252 within the project site. The extraction was monitored by an archaeologist and all samples were visually inspected, screened and photographed in the

field. The report indicates that the testing did not identify any evidence of P-43-000252 within the APE and that no known cultural resources are present within the APE. However, because the surrounding area is sensitive for prehistoric archaeological deposits, the VA has stated that a qualified archaeological monitor meeting the Secretary of the Interior's Professional Qualification Standards (SIPQS) will provide construction staff with archaeological awareness training prior to construction-related ground-disturbing activities. Based on the results of their testing effort, the VA has proposed a finding of *no historic properties affected* for this undertaking and have requested my concurrence. After reviewing this document I have the following comments:

- The VA has not provided documentation of their efforts to consult with interested Native American parties regarding this undertaking thus far, and has not indicated if any responses have been received to their April, 2015 solicitation of comments. I recommend distributing the *Archaeological Testing Report* to appropriate Native American groups that may take an interest in the project area, as identified by the NAHC, and soliciting their comments on the proposed undertaking.
- Given the sensitivity for prehistoric archaeological deposits in the region, and the identification of an isolate (a handstone and possible fire affected rocks) on the ground surface within the APE, I recommend that an archaeological monitor meeting the SIPQS for Archaeology be present to observe all ground-disturbing activity on site for the undertaking.
- Pursuant to 36 CFR 800.4(d)(1), I concur with the VA's finding of *no historic properties affected* for this undertaking, on the condition that the VA implement the recommendations made above. Please evidence your agreement by signing the signature block below and returning the letter to me. Alternatively, you may provide my office with a letter agreeing to the proposed conditions.

Thank you for seeking my comments. If you have any questions or concerns, please contact Jessica Tudor at (916) 445-7016 or e-mail at Jessica.Tudor@parks.ca.gov.

Sincerely,

for Julianne Polanco
State Historic Preservation Officer

Elizabeth Joyce Freeman, Director
Department of Veteran Affairs
Palo Alto Health Care System

8/7/15
Date

**DEPARTMENT OF VETERANS AFFAIRS**
**Palo Alto Health Care System**
**3801 Miranda Ave.**
**Palo Alto, CA 94304**

AUG 10 2015

In Reply Refer to: 640/720

Ms. Julianne Polanco
California State Historic Preservation Officer
Office of Historic Preservation
1725 23rd Street, Suite 100
Sacramento, CA 95816

Dear Ms. Polanco:

Thank you for continuing consultation in support of VA Palo Alto Health Care System's (VAPAHCS) proposed undertaking to lease property at 5855 Silver Creek Valley Place, San Jose, California, for the construction and operation of a new Community Based Outpatient Clinic (CBOC) (SHPO Reference: VA_2015_0414_001).

VAPAHCS received your comments and conditional concurrence letter, dated July 13, 2015, supporting our finding of *no historic properties affected.* We agree to the proposed conditions and the signed conditional concurrence letter is attached. Specifically, to address archaeological sensitivity in the area surrounding the proposed project site, VA will ensure that a qualified archaeological monitor is present during all project-related ground disturbing activities. VAPAHCS staff has notified VA Office of Construction and Facility Management - Real Property of their responsibility to provide an archaeological monitor during all project related ground disturbing activities and our staff will coordinate with Real Property staff to ensure that the NHPA Section 106 commitment is implemented.

In response to your comment on further involving the Native American community, I wanted to inform you that for this proposed action/undertaking we combined the NEPA Draft EA 30-day public review with our need to involve the public during the Section 106 process, including outreach efforts to involve California Native American Heritage Commission (NAHC) identified Native American community members. To involve the public and solicit comments, we posted a notice to our VAPAHCS Environmental and Cultural Planning webpage; mailed notices to other local, State, and federal agencies; mailed notices to NAHC identified Native American contacts; and published a newspaper announcement in the *San Jose Mercury Newspaper* for three consecutive days. Unfortunately, we received no comments during the 30-day comment period. We have completed everything reasonably expected of us to solicit comments and involve members of the public, including Native American community members. Our staff will make additional attempts to communicate further with any appropriate Tribal groups and share the testing report with them, if requested. Further, in the event of an inadvertent

discovery, VA will be prepared to meet all NHPA obligations and further work with appropriate members of the public, including Native American community members.

Should you have questions or need additional information, please contact Mr. Ronald Bochenek, Environmental and Cultural Resource Manager, at the address above, phone (650) 814-2866, or email at ronald.bochenek@va.gov.

Sincerely,

Elizabeth Joyce Freeman
Director

Enclosure: (1) NHPA Section 106 Conditional Concurrence Letter dated July 13, 2015, from Julianne Polanco, State Historic Preservation Officer, State of California Office of Historic Preservation to Elizabeth Joyce Freeman, Director, U.S. Department of Veterans Affairs, Palo Alto Health Care System